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A CONTENT ANALYSIS OF

POLICE SUICIDE

IN THE UNITED STATES,

NEWSPAPER ARTICLES: 1 JANUARY 1996 - 1 OCTOBER 1998

By

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DEDICATION

I would like to dedicate this manuscript to my family. My parents, Mr. and Mrs. William C. Cannon, provided the guidance and discipline in my formative years that established the foundation needed to journey this far in my educational endeavors. They have continued to provide advice and support throughout the years and I will always be grateful. My wife, Tiffney, has followed me around the world as a military spouse for the past 16 years and has always supported both my professional efforts and my educational labors. Any success that I have enjoyed is attributable to her love, sacrifices, and understanding. I must also include my children, Chris, Tyler, and Ashley. They have understood when I have had to be away from them due to military duties as well as educational requirements. Moreover, they have brightened every day of my life and are truly a blessing from God.

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ABSTRACT

This study analyzed the content of newspaper articles reporting police suicides from 1 January 1996 through 1 October 1998. These articles were gathered from four databases: Newspaper Abstracts, New York Times, Data Times, and Westlaw (United States Newspapers). Over 200 local, regional, and national newspapers are included in these databases. The search terms were "police" and "suicide" in the first three databases and in Westlaw, the terms were defined as "police" and "suicide" in the same paragraph. Other variations such as "cop," "officer," "trooper," and "sheriff" were also inserted but provided no additional cases.

A total of 19,255 articles were screened to determine appropriateness and 319 were found to be related specifically to police suicides. Within these reports, 82 unique cases were identified and these were studied to ascertain the similarities and differences when compared to existing literature on the subject.

There was some support for the characteristics of the population representative of police suicide; however, the primary causal factors were contrary to those commonly cited. Job stress is reported as the primary causal factor in the majority of the literature, yet was reported in only three cases in this study. Moreover, criminal conduct and departmental violations were reported as the second major causation, behind relationship problems, but there is little information regarding this issue in other studies. Further, the majority of the cases where this was cited as the cause, sex offenses were the most commonly reported misconduct.

Obviously, there are some limitations to any research regarding police suicide and this study has identified some areas clearly in need of further study.

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CHAPTER 1

INTRODUCTION

On July 24, 1998, two police officers were killed in the line of duty at the Capitol.

These men were husbands, fathers, and friends as well as dedicated, hard-working police

officers, viewed as heroes in their tragic deaths. In addition to the loss of life, this

shocking event will have a lasting impact on their families and others that knew them.

National, regional, and local televised news programs carried this and related stories

as headliners. Newspapers and magazines around the nation gave cover stories to this

tragedy. Hundreds of fellow police officers from around the country attended the

funerals with a procession of police vehicles some 15 miles long, clear evidence of a

bond between comrades in arms. In fact, many of the newspapers and electronic media

reports of the shootings and events surrounding them referred to the "thin blue line," the

corps of police officers that separates the public from violence. We are provided with an

imagery of security and safety through the strength and commitment of the men and

women of law enforcement, intent on maintaining a high level of protection even to the

point of sacrificing their own lives so that others may live.

Unfortunately, it is often only through events such as this that many people recognize

the potential for death and injury that is inherent in law enforcement and take measures

aimed at decreasing the risk to police officers. Politicians are quick to recognize the

media attention surrounding a police homicide and take advantage of the coverage to

further their political forum. Other groups are equally parasitic, using these events to

further their causes. Gun-control groups were interviewed decrying the availability of handguns and how this event would not have occurred if handgun ownership were illegal.

Others blamed the mental health community, citing strict standards of patient confidentiality so that the background check required for a gun purchase was ineffective, allowing a person with a documented history of mental disorders to purchase a handgun. Still others call for more police officers, more intense security measures in public areas, and an even greater exchange of personal rights for the good of the community. The death of the police officer and the accompanying pain and turmoil quickly become overshadowed by other issues. In short, the death of a police officer provides for high political drama.

Fortunately, such events are relatively infrequent. There are approximately 18,000 different police agencies across the United States, employing over 950,000 police officers (US Bureau of the Census, 1997). Obviously, with these numbers and around-the-clock service, the number of interactions with the public is in the millions and the potential for police homicide might be expected to be correspondingly high (Kappeler, 1997). However, there were only 131 police officers feloniously or accidentally killed in the line of duty in 1995 and the yearly average for the past six years is roughly the same (U.S. Bureau of the Census, 1997).

More importantly, the FBI Uniform Crime Report for 1995 reported that only 74 officers were feloniously killed in the line of duty with the remaining deaths attributable to accidents (Famighetti, 1996). The Bureau of Justice Statistics reported similar numbers as did Dorbin, et. al. (1996), who reported an annual average of 78 police

homicides from 1979-1993, down from a 21 year high of 132 in 1974. Granted, even one police homicide is one too many, but the evidence indicates it is a relatively rare event.

In fact, accidents claim the lives of almost as many police officers each year as do homicides (Maguire and Pastore, 1997). Dorbin et. al. (1996) reported that 67 police officers were killed in the line of duty in 1993 and there were 59 accidentally killed during that same year (Maguire and Pastore, 1997). A review of the data from 1983 to 1993 reveals similar numbers with a total of 783 police homicides and 758 accidental deaths. Clearly, there is not a significant difference in the numbers of deaths attributable to these two causes.

Perplexingly, the National Association of Chiefs of Police (1995) stated that suicide claims the lives of more police officers each year than homicides and accidents combined, yet there are few headlines or lead stories when it occurs. Coverage in the printed media is usually limited to a paragraph or two buried on an inside page. Politicians and other groups remain relatively quiet and there is comparatively little research on the topic.

The aftereffects of these events and the pain of the survivors may be even greater than in homicides and accidents as there is often a degree of self-blame among survivors. More importantly, there is some evidence that prevention may have been possible in many cases and may prove to be effective in reducing the number of police deaths attributed to this leading cause of death among police.

According to the National Associations of Chiefs of Police, suicidal acts resulted in the deaths of 300 officers in 1994 alone. In New York City, between 1986-1990, almost

twice as many officers killed themselves than were feloniously killed in the line of duty (New York City Police Department, 1992). Suicide rates are estimated at two to four times higher than the police homicide rate in other studies (e.g., Karel, 1995 and Horvitz, 1994). For example, in Washington state, 40 police officers killed themselves between 1950-1971, compared to only 15 feloniously killed in the line of duty (Milham, 1976), yet most of the studies on police deaths have addressed police killings committed by criminals (Baker and Baker, 1996).

Suicide is presently the eighth leading cause of death in the United States (Centers for Disease Control, 1992) and it is clearly a concern within law enforcement. Elizabeth Langston, executive director of the National Fraternal Order of Police's Center for Criminal Justice Statistics, states that, "Suicides are more preventable than homicide, so we want to do everything we can to keep officers alive. With all of the problems they're experiencing already, there's no reason for them to take their own lives" (Law Enforcement News, 1995, April 30, p. 8). Curiously, it may be all of the problems they're already experiencing that leads an officer to take his or her life. Among the many problems police officers face, the critical incidents they most often face include the homicide, accidental death, and suicide of fellow officers, the latter being the most significant (Wells, Getman, and Blau, 1988), and probably the least understood.

Although several studies have been conducted within individual departments, there is relatively little research on this topic and that which is available is often contradictory. There are reports of police suicide rates as high as 203.66 per 100,000 (Nelson, 1969) and as low as 8.1 per 100,000 (Dash and Reiser, 1978), and there are obviously some

departments that have never had a police officer commit suicide. Some occupational comparisons have found higher rates among police officers than other occupations (Nelson, 1969; Kroes, 1976; and Richard and Fell, 1975), while other studies have found similar or lower suicide rates among police officers than other occupations (Labovitz and Hagedorn, 1971 and Bedeian, 1982).

Throughout the literature, there are multiple reasons cited for police suicides, differing to some degree by the profession of the researcher, and these are often found to be in contradiction as well. For example, job stress is cited as a primary causal factor in police suicide in many articles on the subject (Cummings, 1996; McCafferty, McCafferty, and McCafferty, 1992; Lester, 1983; Territo and Vetter, 1981; and Terry, 1981). In fact, these are but a few of the articles citing high stress as a causal factor in law enforcement officers killings themselves. Of course, there are other researchers who indicate there is no definitive support for this assumption. For example, Kappeler, Blumberg, and Potter (1996) purport that the link between police stress and suicide is nothing more than a "myth" perpetuating the perception of the law enforcement officer as a "battered and blue crime fighter." Ivanoff (1994) holds a similar view stating that job stress provides "too convenient an explanation," while ignoring other factors.

Clearly, there is a great deal of contradiction and confusion about police suicide that may be somewhat clarified through an in-depth examination of the topic. Existing prevention programs may be improved and others implemented with a greater understanding of the precipitating factors with the ultimate goal of reducing the number of police officers who kill themselves. Additionally, it may be that some of the

underlying problems associated with research on this sensitive subject can be identified

and corrected through increased attention on suicide as the leading cause of death among

police officers.

CHAPTER 2

LITERATURE REVIEW

"Prudence and courage should engage us to rid ourselves...of existence, when it becomes a burden." Hume, On Suicide

"Death will tempt people with the promise of greater security that they can find in this lifetime—unless and until such time as we are able to teach man to accept his own destiny." Dr Joost A.M. Meerloo

In examining police suicide, we are faced with the issues revealed in these two quotes. The officers who kill themselves apparently believe that their very existence is burdensome beyond their ability to withstand. Conversely, the administrator, supervisors, peers, and others are faced with the task of getting suicidal officers to understand that there are better alternatives than self-inflicted death. "By its very nature, suicide is an act of desperation, carried out when less drastic avenues of coping seem unavailable or inadequate" (Violanti, 1996, p. 84), yet there is little comprehension of its causation. The springboard for a better understanding of suicide among police officers and a subsequent reduction in the number of officers who kill themselves is a comprehensive review of the available literature on the topic.

One of the first issues raised in much of the existing literature is the problem of research on this topic. Lester (1978) notes the desire of police departments to protect the image of the department as well as the individual officer and his or her family. Police suicides may be wrongly classified as accidents or undetermined deaths, often intentionally to shield the officer, the family, and the department from the stigma associated with suicide. Violanti (1995) attributes this to the police subculture which purports a "myth of indestructibility" so suicide is viewed as disgraceful (see also

Violanti, 1994; Wagner and Brzeczek, 1983; and Kroes, 1976). Police officers also tend to be a highly cohesive group and "take care of their own," as evidenced in the stories around the homicide of the two police officers in Washington, D.C. Violanti et al. (1996), allege that since police investigators are normally the first at the scene of a suicide, they can readily control information and evidence to protect the victims, families, and department from the disgrace often associated with suicide.

Researchers are also handicapped by a lack of organized and consistent collection of data on this subject, poor record keeping, and a deliberate underreporting (Violanti, 1995; Karel, 1995; and Ivanoff, 1994). Many departments either do not collect such information or are reluctant to release it. Even the Federal Bureau of Investigation Uniform Crime Report does not provide data on this subject although one statistic noted that eight officers died from 1981-1990 as a result of "accidental shootings, self-inflicted" (Federal Bureau of Investigation, 1990).

Further, most of the existing research is based on local data and often relatively few suicides. Chance fluctuations with small samples as well as local and regional variations may also affect the suicide rates among police officers and may contribute to the inconsistencies and problems associated with studying the subject (Stack and Kelley, 1994). These variations in rates across departments may result in inaccurate statistical results. Loo (1986) points out that a department with no suicides in one year and only one or two the next, may have a substantial increase in suicide rates.

These are but a few of the problems researchers face when studying police suicide and, as indicated in the introduction, there is relatively little information on this topic.

Despite the comparative lack of research, articles on police suicide are found in very diverse disciplines. For example, television and radio talk shows have featured the tragedy of police suicide on several occasions and entertainment magazines such as Time, People Weekly, Newsweek, and Maclean's occasionally carry stories on particular suicides, generally focused on the personal strife and human-interest aspects. Similarly, articles concerning police stress, prevention programs, and the role of police administrators in dealing with potentially suicidal officers are generally found in police journals such as Police Chief or the FBI Law Enforcement Bulletin. Some scientific studies and scholarly research may also be found in these journals; however, the majority of these articles are in more scholarly periodicals such as Psychological Reports, Sociological Inquiry, American Journal of Psychiatry, as well as various medical journals. The literature is categorized as "non-scientific" or "scientific" based on the type of article and journal in which it is found. Interestingly, both contain some common threads.

NON-SCIENTIFIC LITERATURE

While the information in these articles is not scientific in nature, it may still provide some useful insight into police suicide, particularly with regard to possible causes which generally have some credence in the more scientific material. A major difference is the methodology in which the information is derived as empirical evidence is absent in most of this literature. Moreover, there appears to be an emphasis on the environment in which the suicide takes place as well as the aftermath for the family, friends, and others—the human-interest focus.

Rosen and Haederle (1996) report on a police officer in Oklahoma who slit his wrists and then shot himself four days before he was to receive a medal for his valor in the 1995 Oklahoma City bombing, pulling four people from the rubble. His case points to a multivariate causation with distress associated with the bombing, a history of marital discord and troublesome relationships, financial problems, and a chronic back injury due to a fall during the rescue.

Relationship problems are also cited in other cases such Officer Kimberly Cassas who was thought, by the New York City Police Department, to have killed herself after becoming depressed over an impending divorce (Stasi, 1996). Then-police commissioner Bill Bratton was quoted the day after her death as saying, "Most of the suicides that have occurred since I have been police commissioner have involved relationships, oftentimes coupled with alcohol and the availability of a firearm" (p. 45). Ironically, after further investigation, her estranged husband was arrested for her murder but Bill Bratton can find solace in that Cassas' death was attributable to relationship problems and the availability of a firearm, albeit in a different scenario.

Misconduct, illegal activities, and other forms of corruption have also been cited as possible reasons for police suicide in several articles. Schinderette and Bacon (1991) report on a well-respected officer who killed himself after being implicated in the disappearance of his adopted daughter. After his death, his lawyer provided the police with videotape on which the officer confessed to beating the little girl to death in a fit of anger, before severing her head, arms, and legs with a kitchen knife, disposing of the body parts at various remote locations. There is no mention of prior outbursts of anger or

citizen complaints and his fellow officers wonder how such an exemplary officer and trusted friend could have committed such a savage act.

In Ottawa, Canada, a senior Royal Canadian Mounted Police inspector apparently committed suicide after being implicated in a drug-trafficking investigation (Maclean's, 1993, January 4). Kopvillem and Broshahan (1989) report on a Winnipeg police inspector who killed himself after criticism and a justice inquiry into the handling of several cases under his authority. Yet another Canadian police officer shot himself in the chest to avoid arrest after being charged in the murder of two fellow officers (Burke, 1986). In each of these cases, there is an implication that departmental morale was low and that stress, related to internal bureaucracy and investigations was high—both considered contributing factors by many.

Other articles identify a possible link between alcohol and self-inflicted death. For example, a New York City officer killed himself while playing Russian Roulette after becoming "very intoxicated" during a long day of celebrating St. Patrick's Day at a local bar (Callahan, 1996). In examining police suicide, Nix (1986) found that answers are elusive but one of the seven cases she studied involved an intoxicated officer who had been arrested for suspicion of drunken driving at the scene of an accident in which his passenger was killed. A similar story appeared in Law Enforcement News (1994, October 31). A New York City officer, three days after graduation from the police academy, killed himself after being charged with drunken driving and leaving the scene of an accident. A subsequent study found that substance abuse was a leading contributing factor in police suicide.

In just these few examples, there are several possible reasons provided for police officers killing themselves: stress, marital discord or relationship problems, misconduct, illegal acts, corruption, and alcohol use. Evans and Farberow (1988) add the possibility that people whose work involves giving nurturance and help to others may have a greater predisposition towards suicide, citing greater anxiety and stress than other occupations. Departmental bureaucracy and a lack of support are recognized as potential causal factors by Bloch, Calabresi, and Lafferty (1994), among others.

Additionally, many articles identify the ready availability of firearms as a major factor, pointing out that this method generally results in a completed suicide where other methods often leave the possibility of rescue (Quinnett, 1998; Law Enforcement News, 1996, December 31; Marcus, 1996; Law Enforcement News, 1995, April 30; and Lester, 1989). Violanti (in VandenBos and Bulatao (eds.), 1996), indicates that approximately 95 percent of police suicides were committed with guns. Other studies also reflect that firearms are the preferred method in the majority of police suicides (e.g., Friedman, 1967; Nelson and Smith, 1970; Labovitz and Hagedorn, 1971; Heiman, 1977; and Danto, 1978). Interestingly, the use of firearms as a method of suicide among gun owners is significantly less at approximately 60 percent (Kellerman et al., 1992), casting some doubt on the assumption that the availability of a firearm is correlated to a higher suicide rate.

A brief review of newspaper articles is rewarded with narratives of police officers taking their own lives apparently due to some of these possible reasons. Misconduct and illegal acts are common. The Denver Post (Robinson, 1997), carried a story of a deputy

who apparently killed himself only hours after being suspended over allegations of sexual impropriety with a minor. A probationary deputy in Illinois also took his life after being placed under investigation for "an alleged incident of sexual impropriety" (Kelly, 1997). Similarly, in North Carolina, the Graham County Sheriff killed himself after charges that he fondled an employee earlier in the year (Charlotte Observer, 1998, Aug 11). Closer to home, a Kenton County, Kentucky police officer accused of sexually abusing five girls and facing 10 counts of rape and five counts of sex abuse, walked out of his court hearing and killed himself (Lexington Herald-Leader, 1998, January 29).

Of course, marital problems are also a recurring motive in accounts of police suicide. A San Jose police officer, suspected in the death of his wife, killed himself three days after her body was found (Finz, 1997). A similar situation is reported in the New York Times (Herzenhorn, 1997), wherein a Transit officer killed himself just moments after killing his former girlfriend on a crowded street corner and marital problems were blamed in the suicide of a Washington, D.C. officer (Loose, 1997). A female police officer in the Los Angeles Police Department, separated from her husband and dating a superior, apparently killed herself because her lover reneged on his promise to leave his wife (Glover, 1998).

Alcohol has also been linked to suicides in several articles. The Los Angeles Times (Abrahamson, 1997) reported the suicide of an FBI agent just two hours after being released from jail following an arrest on suspicion of attempted carjacking and public drunkenness. The Los Angeles Times also published an account of a veteran Los Angeles police officer who killed himself after being confronted by investigators as a

suspect in a hit-and-run accident, possibly while driving drunk, that seriously injured a woman and her young child (Lait and Glover, 1997).

Job stress is also perceived as a causal factor in other newspaper narratives concerning police suicides. The St. Louis Post-Dispatch (Bryan, 1997) carried a story of two Clinton County deputies who were close friends and committed suicide three days apart. Their chief stated they "...just didn't know how to leave their jobs behind. They lived and breathed their work. They took it home with them" (p. B3). Depression over the lost of his friend apparently led the second deputy to kill himself. Depression was also the reason cited in the death of an officer in Westwego, Louisiana, after she summoned a supervisor, abruptly announced her resignation, and drove away, later killing herself (Young, 1998).

In other cases, there is a disturbing lack of an apparent reason for the suicide. The Mount Vernon, Illinois police chief apparently killed himself and everyone who knew him is at a loss as to a possible reason. Chief Circuit Judge Terry Gamber who knew this officer since high school said, "He didn't seem like the kind of guy who would do this. It is a shock for everybody. Ron was the kind of guy people respected. We may never understand what happened and why" (Malone, 1998, p. B3). A search for clues was also underway within the San Francisco Police Department following the apparent suicide of a 27-year police captain. He was the seventh San Francisco police officer to kill himself in the past decade. In most of the other cases, there was evidence of marital problems or criminal or disciplinary charges but in this case, there was no such obvious reason for the suicide (Sward and Wallace, 1997).

Of course, newspaper articles such as these normally contain information on only one incident so trends and generalizations are difficult to establish. However, as previously indicated, much of this information is given some credence in the more scientific literature, although there is still a lack of all-encompassing findings.

SCIENTIFIC LITERATURE

Scientific examinations have tended to focus on particular police departments rather than nation-wide studies so that departmental, geographic, political, economic, and other differences make absolute findings problematic. Other researchers have emphasized the comparison of suicide rates among various occupations. The literature also reveals that police suicide is a problem not limited to the United States. To facilitate a review of this information, it will be sub-categorized into "United States Case Studies," "International Case Studies and Aspects," "Occupational Comparisons," and "Other Studies," followed by discussion of some other pertinent aspects of police suicide.

United States Case Studies

There are approximately 10 to 15 major scientific studies of police suicide within specific departments or agencies within the United States. The earliest such study was conducted by Dr. Friedman in 1968, examining police suicides within the New York City Police Department from 1934 to 1940. Heiman (1975) and Lester (1993) also explored these suicides and at least two other studies have involved the New York City Police Department. The Los Angeles Police Department has also been the topic of research on two occasions, as has the Chicago Police Department. Pertinent case studies are identified in Table 1, and a synopsis of each is provided.

Table 1. Case Studies of Police Suicides in the United States

Author	Date	Location	Time Frame	Suicides	Rate*
Friedman	1967	New York	1934-1940	93	80.0
Nelson and Smith	1970	Wyoming	1960-1968	7	203.66
Heiman	1975 (a)	New York	1934-1940	91**	80.0
Heiman	1975 (b)	New York/London	1960-1973	74/16	19.1/5.8
Heiman	1977	23 major US cities/ London	1960-1972	--	--
Danto	1978	Detroit	1968-1976	12	
Dash and Reiser	1978	Los Angeles	1970-1976	4	8.1
Cronin	1982	Chicago	1970-1979	39	29.5
Wagner and Brzecek	1983	Chicago	1977-1979	20	43.8
Josephson and Reiser	1990	Los Angeles	1977-1988	10	12.0
Lester	1993	New York	1934-1939	91**	80.0
Violanti	1995	Buffalo, NY	1950-1990	24	

* Suicide rates were not calculated or were otherwise unavailable in some studies.

** Further investigation of the 93 cases in Friedman's study revealed that two of the cases were probably accidental deaths rather than suicides.

Friedman (1967) – New York City Police Department, 1934-1940

This is perhaps the first detailed case study on police suicides and was conducted by Dr. Friedman in response to a request by Mayor La Guardia who had been made aware of an alarming proportion of suicides among police officers, a rate nearly six and one-half that of the general population. The research is conducted from a psychologist's viewpoint and much emphasis is placed on the personality, emotional instability, and behavioral traits among the officers as well as the significance of changes in the climate of the department due to the corruption during the Tammany era of 1918-1934 followed

by the La Guardia era which represented a much less tolerant attitude toward overly aggressive, alcoholic, or unprincipled police officers.

The officers who killed themselves during this six year period ranged in age from 24 to 50 with a bi-modal distribution for the 30 to 35 and 39 to 45 years old age groupings. These two groupings accounted for 83 percent of the total number of suicides. Seventy-five percent of the officers were married and approximately 65 percent were patrol officers at the time of their death, although all ranks (patrol officer through inspector) were represented in the cases. Ninety percent of the officers killed themselves with their service revolver and five cases involved murder-suicide combinations.

Nearly one-third of the officer had a "significant sick record" and at least 20 were identified as probably alcoholic. Twenty-seven had medical records in which psychiatric diagnosis had been made and at least five had previously recorded suicide attempts. Time of service ranged from two to 30 years with 76 percent joining the Department during the heyday of Tammany, when admission was often possible through illegal and improper mean, independent of examinations and personal qualifications. This is important to Friedman who reports that many of the officers that killed themselves would not have been recruited and selected under a more rigorous, legitimate selection process.

In fact, 37 officers that committed suicide were hired between 1925 and 1927, a period especially wrought with corruption and political favors. Many of these officers displayed aggressive and impulsive personalities. At least 15 manifested obvious psychotic behavior prior to their suicide and four of the five murder-suicide cases are found in this group. Additionally, alcoholism was found to be extreme in the majority of

these cases. Deleting this relatively unstable, and perhaps unworthy, group from the total reduces the suicide rate to one very close to that of the previous six years.

Obviously, each individual case is different and there are any number of factors that may have contributed to this final act. Individualistic traits, organizational climate, alcohol or drug use and others are but a few possible influences. There are no clearly defined recommendations in this study but there is an inference that better recruitment and selection processes as well as a more qualified and informed leadership core may decrease the number of police suicides. If nothing else, this study serves as the cornerstone for future research and studies that may lead to improved techniques and prevention programs and reduce the number of police suicides. As Friedman said, "With further research in depth perhaps we may hope to find reliable diagnostic criteria and enhance a prophylaxis of suicide" (p. 449).

Nelson and Smith (1970) – Wyoming, 1960-1968

This study is sociologically oriented and is a continuation of Nelson's doctoral dissertation on suicide in Wyoming. In this earlier work, Nelson (1969) reported that police officers, truck drivers, and bar tenders sustained high incidences of suicide compared to other occupations and the suicide rate for law enforcement officers was 203.66 per 100,000. This rate was reported as the highest for an occupational group within the state and the author cited such issues as long, irregular work hours; a lack of respect from those they served; and a self perception of an "outsider" in the regular society as contributing to this high rate. Of course, it should be noted that this rate was based on only seven cases during this time period.

Based on this information, Nelson and Smith examine police suicide as a possible product of the work and identify certain conditions and situations which are central to law enforcement that seem conducive to a disproportionately high suicide rate. First, police work is a male-dominated occupation and males have usually sustained suicide rates three to four times higher than females. Secondly, males tend to employ firearms as the most positive and lethal means of self-destruction and police officers obviously have greater access to firearms and good knowledge of their use. Indeed, all of the police suicides in this study were carried out with firearms. Nelson and Smith also point to the physical and psychological demands on the police officer which are not common to more conventional occupations such as "his constant confrontation with potential death" (p. 297). The long, irregular work hours that may contribute to strained family relationships and difficulty in becoming actively involved in the community and collective activities leading ultimately to relationships that are "…all too often tenuous and cursory" (p. 297). Additionally, the officer's experiences with others are often in situations that may be considered unfavorable to effective interpersonal skills.

Public criticism, violence, apathy, and a feeling of futility are common and the officer begins to perceive himself as an "outsider" in a system that considers him only a "necessary evil." Nelson and Smith consider this information in light of Durkheimian theory and report excesses of anomie and egoism—alienation from others because of their work situations and social exclusion. This, to the authors, makes the presence of suicide potential in law enforcement officers understandable.

Heiman (1975(a)) – New York City Police Department, 1934-1940

Dr. Heiman reexamines the original files and case histories of the police suicides in Friedman's earlier study of the New York City Police Department, offering additional comments and speculations on the characteristics of those men. Psychological autopsies were conducted on four questionable suicides and Heiman felt that two were probably accidental deaths rather than an intended suicide, changing the total number of suicides but with no significant change in any other factor.

Friedman's hypothesis and concern over the officers hired during the Tammany Hall era is discussed in some detail as a variant of the "Aggressive Hypothesis" (Rojcewicz, 1971)—becoming a police officer provides a legitimate, socially acceptable outlet for aggressive behavior. Indeed, it is the police officer's job to use this sanctioned power and aggression to promote law and order, even to the point of using deadly force. Conversely, he or she must also refrain from violence and killing as part of his or her public trust, causing internal tension and role conflict. This tension and conflict, possibly unqualified officers being hired under political patronage, and extreme changes in the direction of the police department were believed to be key factors in suicides nearly doubling during this period when compared to the previous six years.

Heiman's research did find a statistically significant difference between these two groups; however, he also found that the high suicide rate for New York City may not be unique for those particular years. Significant differences were not found between New York City and both Chicago and San Francisco police during the 1934-1939 period, calling into question the extraordinary experience of New York City. Of course, the lack

of statistically significant differences when compared to other departments does not

negate loss of life and an unquestionably high number of suicides.

Heiman (1975(b)) – New York City Police Department and the Metropolitan Police Department of London, 1960-1973

Heiman reviews Friedman's research of the New York City Police Department from

1934-1939, which serves as the foundation for this study. Much of the information is

identical to that above and will not be repeated here; however, Heiman examines the

suicide cases in respect to Hendin's (1963) psychodynamic patterns he derived from his

study of the death fantasies and dreams of suicidal patients. These include death as

retaliatory abandonment, death as omnipotent mastery, death as retroflexed murder, death

as a reunion, death as rebirth, death as self-punishment, and death as a process that in an

emotional sense has already taken place, i.e., the patient sees himself as already dead

(terminal illness). A review of the material on the police suicides indicate that many of

the suicides fit into one or more of these categories; however, Heiman believes that the

patterns are not unique and that a single psychological mechanism is too simplistic.

Rather, it is a variety of behaviors and thoughts as well as socio-cultural factors that

result in self-inflicted death.

An effort is made to link both the psychological and sociological variables in studies

of police suicide but information on the topic is not easily obtained. Many police

departments either do not maintain such information or are reluctant to release it. It is

also common to find the data that is available to be in statistical form rather than the

original police files, thereby making psychological examinations difficult or overly

generalized. Socio-cultural aspects are somewhat easier to explore as reflected in this study.

The New York City Police Department and Metropolitan Police Department of London are used for comparative purposes. There were 74 police suicides in New York City compared to only 16 in the Metropolitan Department with corresponding suicide rates of 19.1 and 5.8 respectively. There is a significant difference between these two departments and the London rate is comparable with the white-male general population whereas the New York City rate is nearly twice that of the general population.

Differences are attributed, in part, to the dissimilar police experiences in New York and London. Law enforcement officers in the United States routinely carry firearms and are thoroughly trained in their use while London officers seldom carry firearms. It is not surprising, then, that firearms are used in the majority of police suicides in the United States while a less-lethal method is generally used in London. Moreover, role acceptance of the police by society is perceived to be different. In the United States, police officers are often viewed as a "necessary evil" that is tolerated in a violent society while the "bobbie" is seen as helpful and is respected. There are undoubtedly other societal differences that may influence the police experience and impact on the suicide rates of different police agencies around the world.

Certainly, both the psychological and socio-cultural variables must be considered in an examination of suicide. Of course, it is difficult, if not impossible, to fully understand the interaction of the two in suicides. Dr. Stelzner, (cited in Friedman, 1967), stated, "No matter how much we try to categorize suicides... [there is] a characteristic shared by all:

a general diminution of psychological capacity; an inability to use the will, the understandings, or the imagination to conceive of alternatives or a change in the intolerable situation and to use the alternative to tear oneself from the suicidal obsession.... Goethe puts the words into the mouth of Werther: "Nature finds no exit from the labyrinth of confused, contradictory forces, and the human being must die""" (p. 273). Perhaps this points to the futility of categorizing suicides and clarifies the need for intervention and the introduction of alternatives to those who may be suicidal.

Heiman (1977) – 23 Major United States Cities and the Metropolitan Police Department of London, 1962-1970

"One setting that is highly visible and intimately involved with such issues as death and violence but is not usually considered as harboring active participants in the process of termination by self-destruction is the police department. However, the standardized mortality ratio among law enforcement officials is one of the highest of any occupation studied by the U.S. Department of Health, Education, and Welfare" (Heiman, 1977, p. 1286). Heiman, in this statement, initiates this study into police suicide and examines the Metropolitan Police Department of London and the departments of 23 major cities in the United States.

The London data indicates that there were 16 suicides over this 13 year period and the typical police suicide for that city was married, in his early 40s, had nearly 20 years of police service, and died by gas inhalation or drug ingestion. Contrary to the norm in the United States, none of these suicides was completed with a firearm. Of course, London police officers do not carry firearms as a rule so availability and the inherent socialization process common in the United States is lacking.

The data from the police departments responding to Heiman's questions reveal an officer in his late 40s, divorced or seeking divorce, at or near retirement after 15 or more years of service, and experiencing difficulties surrounding the use of alcohol. This data is possibly limited because only the following 23 cities responded to the research inquiry: Albuquerque, Atlanta, Boston, Dallas, Denver, Detroit, Honolulu, Little Rock, Los Angeles, Miami Beach, Minneapolis, Newark, New York, Philadelphia, Phoenix, Portland, Rochester, Salt Lake City, San Diego, St. Louis, Seattle, Topeka, and Washington, D.C. Eleven other major cities did not respond.

Of the responding departments, six reported no suicides during this period and four reported an "Unknown" number of suicides. Several had estimates only such as Detroit with "About one per year" and Minneapolis with "At least two" while Philadelphia related "At least one." New York indicated that there were "About 74" within that department.

It may be that the most important aspect of this study is that it clearly highlights the difficulty in obtaining consistent and reliable data for useful comparisons among police departments in the United States. Some departments question the usefulness of this type of research and may be reluctant to release such information, if it even exists. In those cases where the data is available, it is usually incomplete, poorly maintained, and inadequately evaluated.

Danto (1978) – Detroit Police Department, 1968-1976

Dr. Danto is a psychiatrist who has worked extensively with police officers in Detroit, Michigan. He has learned "firsthand that policemen's lives are hectic, dangerous,

frequently unrewarding, filled with unbelievable monotony, unstable, and prone to development of drinking problems and marital problems and divorce, and to frustration over a growing community criticism of their value and effectiveness" (p. 32). In fact, it was his experience with police officers that led to his interest in their suicide problems and this subsequent study.

From February 1968 through January 1976, there were 12 Detroit police officers, all male, who committed suicide. Eleven of these men were patrolmen and the majority were in their late 20s. Eleven were married and all but one had at least a high school education. Nine were military veterans and five had experience combat. Eleven of the officers had been injured at least once in the line-of-duty during confrontation with citizens in the process of arrest. Significant use of alcohol was reported in the records of five officers and four had significantly reduced performance ratings shortly before their deaths. Eight of the officers killed themselves with a firearm and murder followed by suicide was the pattern in four cases. Marital problems were seen as precipitating events in six cases and Danto concluded that, "by far and away the most upsetting problem for the suicidal police officer is his marriage" (p. 36). In five cases, the officers had at least one psychiatric consultation in their records.

In making these generalizations based on his findings, Danto identified a lack of personal information in the records of those officers who killed themselves. Psychiatric reports, when included in the records, were of poor quality and of little value since each recommended a return to duty, and the return was followed by suicide. Evaluations frequently gave bad advice or suicide assessments and personnel records contained

descriptions of personal traits such as neatness and appearance but there was nothing

regarding temperament, anger management, alcohol use, and interpersonal skills.

In light of these, and other, shortcomings, Danto makes several recommendations

toward prevention programs and the increased use of mental health professionals within

police departments. Aftercare for survivors is also stressed. Most importantly, he

recommends specific criteria for suicide investigation based on Schniedman's criteria for

a psychological autopsy.

Within this framework, as much information as possible should be obtained on the

following:

1. identifying information
2. family background
3. service ratings
4. medical history
5. reprimands
6. citations and commendations
7. combat wounds in police service
8. military service
9. pre-appointment employment history
10. history of suicide in the family
11. details of the suicide
12. personality traits
13. detailed description of stresses
14. nature of interrelationships with others
15. fantasies or dreams of death, suicide, accident, homicide
16. significant changes in person before death

These guidelines should result in more meaningful knowledge about police suicide as

well as more effective prevention programs.

Dash and Reiser (1978) – Los Angeles Police Department, 1970-1976

This study was undertaken in response to the common perception that police officers

have the highest suicide rate of any occupational group—a perception that is questionable

due to the lack of adequate data on the topic. Dash and Reiser begin by examining the background information available on police suicide and cite the high stress level, especially the stresses associated with work factors such as danger, violence, and authority. Organizational and role pressures also appear to contribute to the stress load, both found to be exceedingly strong and influential by an earlier study by Reiser (1974). Additionally, police officers are likely to encounter some degree of resentment, hostility, and aggression among the public. In view of these stressors and a readily availability means (service weapons), one may expect to find elevated suicide rates among police officers.

This study compared the suicide rates of Los Angeles police officers with the general population in Los Angeles County as well as the national rates for age-matched groups. With four suicides during this period, the seven-year average suicide rate for the Los Angeles Police Department was 8.1 per 100,000—substantially lower than the rate for Los Angeles County (16.7 per 100,000 in 1972 and 15.3 per 100,000 in 1973) and the national rate of approximately 12.5 per 100,000. The authors relate that the reasons for this difference are only speculative but identify such possible contributing factors as pre-employment testing, background investigations, and training.

Both psychologists, Dash and Reiser refer to a study of the Caracas, Venezuela, Police Department that found a significant correlation between psychological testing and lower suicide rates. The Department of Psychology studied the suicide rate among police officer in the four years preceding and the four years following the introduction of such testing to determine its reliability. This study found that 74 of the 81 officers who killed

themselves during this period had not been subjected to psychological tests (International Police Criminal Review, 1973).

The relatively low suicide rate for the Los Angeles Police Department, then, is at least partially attributable to psychological testing and the comprehensive prevention program which was implemented in 1968 when the department hired a full-time, in-house psychologist. Since that time, the Behavioral Science Services Section has grown to two full-time psychologists assisted by three predoctoral psychology interns. This sections is responsible for training at the recruit level as well as in-service and management sessions. A variety of workshops and seminars are conducted and free counseling services are available. In 1976, for example, there were over 1,200 appointments for some form of counseling and a full 90 percent of these were confidential—mitigating the stigma and added stress often associated with mental health treatment.

In conclusion, the authors concede conflicting results in studies of police suicide rates in different departments and suggest that there are multiple variables related to police suicide. Stress and other considerations such as political, environmental, financial, organizational, and peer groups "...would have to be evaluated on a department-by-department basis in order to arrive at accurate notions of what the comparative suicide experience is and why. This requires more comprehensive record-keeping and reporting on police suicides. Otherwise, the tendencies to stereotype and generalize continue" (p. 21).

Cronin (1982) – Chicago Police Department, 1970-1979

This is a comprehensive study of suicide within the Chicago Police Department and was conducted under the assumption that police officers generally function under more stressful conditions than members of many other professions. Cronin's focus was twofold—to determine if there were identifiable stress factors associated with the suicides of police officers and, secondly, if the suicide rate among police officers was higher than other occupational groups (specifically physicians) and the general population. During the coverage period, the suicide rate of Chicago police officers was 29.5 per 100,000, compared to 24.7 per 100,000 for the general population. Interestingly, the suicide rate for physicians was almost 37 per 100,000 (based on five referenced studies). Even though physicians, in these studies, sustained a higher suicide rate than police officers, the focus is on law enforcement and some of the stressors inherent to the occupation.

Among some of the stressors examined are role conflicts, departmental bureaucracy, stagnated careers, frustration with other sectors of the justice system, shift work, and personal or duty crises. Alcohol use was also examined as a precipitating factor. Not surprisingly, the research found that suicidal officers exhibited some warning signs such as depression, excessive drinking, marital problems, angry outbursts, changes in behavior, and drops in efficiency shortly before their deaths.

Each of the 39 suicides during this period is examined and reported in as much detail as possible and the composite officer is a white male, 42 years of age, a Roman Catholic, with 12.5 years of education, and a veteran of military service. He is a patrol officer with

almost 15 years of service on the police department and has both commendations and suspensions. Additionally, he is married and there is a record of at least one injury in the line-of-duty.

A review of each case narrative reveals that alcohol was a factor in 15 cases and there was evidence of psychological or depressive illness in 29 cases. In 37 of the suicides, the officers killed themselves with a firearm, the majority with a gunshot wound to the head. The study continues to examine such factors as time of day, month of the year, and location of the death. Of these variables, there did not seem to be a discernible trend other than the location which tended to be the officer's home in most cases.

Of particular note, Cronin is one of the few researchers that acknowledges that most officers handle the stress of everyday life and the additional stress of the job without a problem—a fact silently implied in most studies. However, he feels some officers need additional support groups to work through specific issues which arise during their careers. In his words, "To ignore just one officer in his most trying time of need is as big a crime as the act of suicide itself" (p. 49).

Wagner and Brzeczek (1983) – Chicago Police Department, 1977-1979

This study was conducted to determine whether the incidence of suicide is higher among police officers than among the general population with the ultimate goal to produce a profile or guide for supervisors and command personnel to assist in identifying officers who display suicidal tendencies. During the three-year period of the study, 20 officers in the Chicago Police Department killed themselves. Based simply only these

numbers, a law enforcement officer was five times as likely to commit suicide than a citizen of Chicago.

The officer ranged in age from 25 to 60 years and had an average of 13.4 years of service. All of them were male and 13 were married and living with their spouse at the time of their death. The majority was classified as medical roll abusers and alcoholism was documented in 12 cases. Eighty-five percent held the rank of patrolman. Thirteen were white and seven were black—a significant finding because only 20 percent of the Department was black at that time yet black officers accounted for 35 percent of the suicides. Eighty percent killed themselves with a gun and at least two had previously attempted suicide. In almost every case, the officer's job performance dropped notably within the preceding 6-24 months.

Of particular importance in this study is the impact of alcohol in the suicide. Wagner and Brzeczek studied each case file and found that 75 percent suffered from alcoholism, either having been diagnosed with alcoholism or displaying the behavior patterns common among people with alcoholism. Of the remaining five officers, two appeared to have self-destructive behavior patterns and three appeared to have suffered from psychiatric problems. The alcohol link was also been found in some 30 percent of suicides in two separate studies (Connelly, 1980). Another study revealed that a comparatively high proportion of alcoholics commit suicide (Zushing, 1968) and alcohol is also a contributing factor in a significant number of fatal accidents. Wagner and Brzeczek conclude "...if we want to prevent suicide, we must be willing to intervene in the indirect self-destructive behavior of others. Knowing individuals with alcoholism, we

tend to watch their work life, relationships, and health deteriorate, aware that we are watching the progress of a fatal illness" (p. 15).

Josephson and Reiser (1990) – Los Angeles Police Department, 1977-1988

This study examined police suicide in the Los Angeles Police Department and found an average rate of 12.0 per 100,000, an increase from the rate of 8.1 found in an earlier LAPD study from 1970 to 1976. The average profile would reveal a white male officer in his mid 30s, working patrol, abusing alcohol, separated or seeking divorce, and experiencing a significant loss. Notably, there were three minority female officer suicides among the total sample for the first time.

The comparable group rate in Los Angeles County was 13.4 in 1987 (Department of Chief Medical Examiner Coroner) while the state suicide rate for this group was 14.8 in 1986 (Vital Statistics of California). Nationally, the suicide rate has remained between 12.0 and 12.7 since 1977 (National Center for Health Statistics). Overall, then, the comparative data reveal the average police suicide rate for the Los Angeles Police Department is lower than the average at the county, state, and national levels; however, there were only 14 police suicides between 1970 and 1988, indicating caution in interpretation and application of the data. In the words of these researchers, "Research on police suicide continues to be remain sparse. Until more comprehensive research is done across geographical department-size parameters, it isn't possible to speak in broad generalities about police suicides" (p. 228).

Lester (1993) – New York City Police Department, 1934-1939

Friedman's study of these suicides was characterized in negative terms with a high incidence of psychiatric disorder, alcohol abuse, aggression, and problems at work. Of particular concern in his study were the officers hired at the height of Tammany Hall influence between 1925 and 1927; officers who may not have been qualified as police officers except for the political patronage. Conclusion based on this study are questionable due to the lack of a comparison or control group and this study by Lester attempts to provide within-sample comparisons to determine if the findings are similar.

Files on each of the cases contained notes on interviews with family and coworkers, a summary of the officer's record, and a summary of the officer's life and death. All of the suicide victims were male, the average age was almost 40, and the mean year of joining the department was 1922.

The files were coded for the presence of a formal psychiatric examination (18 percent had this characteristic), the presence of depression (25 percent), paranoid ideation (13 percent), alcohol abuse, current problems at work (24 percent), general problems at work over the course of their career (36 percent), whether the officer was married (84 percent), and whether he was a patrolman (84 percent). Other variables were also examined but the most important of these is the apparent motive for the suicide (65 percent personal and 29 percent interpersonal).

Pearson correlation tests were conducted on these variables. Age as an effect was significantly correlated only with alcohol abuse and being a patrolman as older suicides tended to be more often married, less often patrolmen, and less often alcohol abusers.

The year of joining the department found the same associations since age is strongly associated with this factor. Alcohol abuse was significantly associated with depression, general problems at work over their career, interpersonal motives for the suicide, being a patrolman, and age. Those officers hired between 1925 and 1927 more often had current job problems, more often committed a murder-suicide, and were younger. The first two correlations remained significant even when age was controlled for by partial correlation coefficients.

Friedman reported a high suicide rate for the New York City police officers in this period but Heiman (1975) found similar rates in San Francisco and Chicago during the same period. Additionally, Friedman's view that the officers hired between 1925 and 1927 were unqualified to be police officers and especially prone to suicide received only minimal support in this study. While this group was more likely to have current problems at work and to be more prone to murder-suicide (a rare occurrence, accounting for only 4 percent of the suicides), there did not appear to be a significant difference regarding alcohol use, psychiatric evaluations, or a history of work-related problems.

Police officers who were alcohol abusers were more prone to have a history of problems at work and more likely to have interpersonal precipitants for their suicide; however, it appeared that the alcohol abuse was not a result of work-related or interpersonal problems but rather the cause of them. These results were similar to the findings in the study Danto (1978) conducted on suicide in the Detroit Police Department. He found that alcohol abuse, marital problems, and formal diagnoses of psychosis were common precipitating factors in police suicide. Lester and Danto found

little evidence that work-related problems or job stress played a significant role in police suicide based on their studies.

Violanti (1995) – Buffalo, New York, 1950-1990

This study attempts to identify suicide trends among police officers. Based on 24 suicides over this 40 year span within the Buffalo Police Department, Violanti found that there was no statistically significant fluctuation in police suicides. There were, however, some interesting trends.

Violanti divided the period into five-year increments and found that suicides occurring in 1956-1960, 1966-1969, and 1986-1990, were considerably higher than other time periods, accounting for almost 71 percent of the total number of suicides. Because the commonly perceived causal factors of stress, access to firearms, shift work, and so on should have remained relatively stable over the entire time span, the search begins for other possible precipitants.

The most promising factor is that these time periods were times of significant change for law enforcement. For example, Violanti ties the 1956-1960 period to the efforts towards professionalizing the police. In the 1960s, there was a great deal of social turbulence and change such as the Civil Rights Movement and the Vietnam War, which obviously impacted, on police officers. Public dissatisfaction with police services, continuing legal and social restrictions, and increases in violent crime were evident in the 1980s. Media coverage of inappropriate police actions and a perceived inability to control crime and criminals put pressure on the officers to change their methods and cast them in an unfavorable light simply because they were police officers. Violanti

concludes that, "One might speculate that such situations were ripe for increased suicide, given that the demands of society and police departments left few alternatives available for officers" (p. 690).

International Case Studies and Aspects

Police suicide, as previously stated, is not limited to departments and agencies within the United States. At least three major studies have focused on police suicide in other countries (Table 2) and several journals highlight information on the topic. The case studies will be summarized and additional information regarding international aspects will be included as appropriate.

Table 2. International Case Studies of Police Suicide

Researcher	Date	Location	Time Frame	Suicides	Rate
Loo	1986	RCMP	1960-1983	35	14.1
Lester	1992	15 countries	1980-1989	--	25.6
Cantor	1995	Australia	1843-1992	59	34.6

Loo (1986) – Royal Canadian Mounted Police, 1960-1983

In response to increasing attention on police suicide over the previous two decades, Loo examined the 35 cases of suicide among the Royal Canadian Mounted Police during this time period. The rate of 14.1 per 100,000 was approximately half that of the comparable general population. As in the majority of studies, the most common method was the service revolver (77 percent).

Loo acknowledges that more study is required regarding causal factors explaining police suicide and that both psychological and sociological factors contribute to it.

Further, there is no single explanatory factor that is sufficient. This particular study was conducted to determine the needs for a psychological services policy and a program to deal with suicide among members of this agency.

The following information was obtained in the case studies. Thirty-four of the 35 suicide victims were male and the average age was 32 years with a range between 19 and 52 years. The average time in service was 11 years and 2 months and close to half were married at the time of their death. Twenty-nine members killed themselves with a firearm, 27 of those with their service revolver. Among the contributing factors to the police suicides, the most common was a distressed psychological state followed by job-related concerns, marital or relationship problems, and alcohol use or abuse.

As indicated above, the suicide rate for police officers was much lower than the comparable general public as well as studies on other police forces. Suicide, then, was not a perceived as a significant problem among the Royal Canadian Mounted Police and Loo offers several possible reasons for this. The first is the selection process wherein there is an extensive applicant list allowing the Royal Canadian Mounted Police to choose the "cream of the crop." Secondly, this agency appears to be greatly respected across the country and a "family" identity and organizational commitment is maintained. Excellent health benefits, including psychiatric services are readily available to the members and this is cited as the third possible reason.

Still, efforts should be made to reduce even comparatively lower suicide rates. Loo recommends more reliable statistics be maintained and that psychologists investigate each suicide or suspected suicide to better identify causal factors and situational variables

for developing suicide prevention programs. Particular emphasis on occupational

stressors and stress management programs is also advised. Profiling for identification

and tracking of high-risk members may also prove beneficial. "In closing, it is evident

that police suicide is a real concern of police forces and that reliable and valid data must

be available in police forces so that valid, research-based policies and programs can be

developed to serve the needs of police officers" (p. 387).

Lester (1992) – Various Nations

Understandably, the majority of literature available examines police suicide within

departments and locations in the United States; however, this issue is clearly not isolated

to this nation. In one of the most encompassing studies, Lester (1992) conducted a

survey on suicides of police officers for 26 countries for the period 1980-1989 finding

that, overall, the suicide rate for police officers did not vary significantly from that of

men in general in the countries reporting data (Table 3).

As reflected, there is a fairly equal distribution with suicide rates of police officers

higher than for men in the general population in Bermuda, Luxembourg, Malta, Peru,

Poland, Puerto Rico, and Turkey; with lower suicide rates among police officers in Fiji,

Hong Kong, Portugal, Sri Lanka, and Switzerland. The police suicide rate was found to

be about average in the Bahamas, Bahrain, Barbados, Iceland, Ireland, the Maldives, and

the Seychelles. Not surprisingly, there is evidence that, where police officers carry

firearms regularly, firearms are the most common method for suicide.

It is surprising though that a large number of countries do not keep records of police

suicide. Argentina, Austria, Belgium, Denmark, the Netherlands, Norway, Sweden, the

United States, the United Kingdom, and Germany are but a few that reported no such records are maintained, yet there is little doubt that many of these countries have implemented suicide prevention programs in many police agencies. Lester advocates systematic data collection on suicide among police officers that could be used to explore the causes, improving prevention programs.

Table 3. Suicide Rates in Nations 1980-1989 (per 100,000 per year)

	Suicide Rates	
Nation	Police	Males in General *
Andorra	0.00	--
Aruba	0.00	--
Bahamas	0.00	2.4 (1987)
Bahrain	0.00	2.6 (both sexes combined)
Barbados	0.00	2.5 (1984)
Bermuda	20.75	6.9 (1978 data)
Botswana	13.02	--
Cyprus	0.00	--
Fiji	0.00	11.0 (both sexes combined)
Hong Kong	7.23	14.6
Iceland	17.24	20.6
Ireland	10.15	12.2
Liechtenstein	0.00	--
Luxembourg	75.28	21.9
Maldives	0.00	2.0 (1987, both sexes combined)
Malta	7.29	1.2
Peru	65.53	0.7 (1983)
Poland	31.51	22.6
Portugal	8.27	14.1
Puerto Rico	28.56	13.9
Seychelles	0.00	3.1 (1982)
Sri Lanka	22.12 (1986-1989 only)	48.8
Swaziland	0.00	--
Switzerland	24.75	35.4
Turkey	16.96	0.3 (1979)
Zimbabwe	34.75	--

* For 1985 from World Health Organization data.

Cantor (1995) – Queensland, Australia, 1843-1992

Cantor was more fortunate than most researchers studying police suicide in that a register of all deaths was available, dating back to the origin of the police service in 1843. Original personal files were also retrievable and this led to the unique opportunity to study the evolution of a major occupational group from its first day. The purpose of the study was to determine the police suicide rate and any changes over time and to characterize the officers in terms of service, health, and personal profiles.

There were 66 suicides identified from the register, the first of which occurred in 1871, some 28 years after the force was organized. Further investigation indicated that seven of these were either accidental or occurred after the victim left the police force and, in seven of the remaining cases, only minimal information was available.

Similar to police suicides in the United States, firearms were used in 79 percent of the cases. Fifty-eight of the victims were males with an average age of 36 years and almost 66 percent of the officers were married. The majority (72 percent) were below the rank of sergeant and the average length of service was just under 12 years. Some type of physical ailment was present in 36.5 percent of the cases and there were many records of "depressed," "alcoholic," "nervous disorder," or "personality change" suggestive of psychiatric disorders, although there was no record of a reliably diagnosed condition in the large majority of the cases. The files on nine of the officers recorded prior suicidal behavior and alcohol was considered relevant in 23 cases. Domestic problems were evident in 34.5 percent of the cases and work-related problems were noted in half of the files.

The data demonstrate a significant decline is suicide rate from approximately 60 per 100,000 in the 1800s to the turn of the century to around 20 per 100,000 more recently (1990). Additionally, the rate appeared to fluctuate with major events. For example, it was elevated in 1934, during the depression and declined in 1945 at the end of World War II. Currently, it is comparable to that of the employed male population in Queensland, Australia, and is not perceived as exceedingly high.

Additional International Aspects of Police Suicide

Australia

Reports of police corruption is Sydney, Australia led to a Royal Commission of Inquiry which concluded in March 1997, after taking evidence from 640 witnesses over two years. Top echelons of the police force were terminated and some officers are expected to be charged. At least ten witnesses, including several police officers, apparently chose suicide over the humiliation of giving evidence over alleged corruption or aberrant sexual behavior after miniature video cameras captured police accepting bribes, dealing drugs, engaging in immoral acts, and even requesting child pornography (The Economist, 1997,March 22).

Lennings (1995) also provided some research into police suicide in Queensland, Australia although his focus was on ideation and risk factors in police officers and justice students. Of particular interest, he related that police in Queensland are one of the highest risk groups for occupational stress disorders, including suicide, a common belief in the United States, as well. The evidence he cites for this increased stress level is, "...the development of specialist counseling services and the development of Critical

Incident Debriefing teams as a mandatory adjunct of police work" (p. 39), which may not be sufficient evidence of higher stress levels for many critics. Other research may not support such an assumption. He also indicates that various surveys have reported both higher and lower risks of suicide for police officers compared to the general population, another similarity to comparable research in America.

Canada

In addition to Loo's study of the Royal Canadian Mounted Police, a review of the literature revealed several stories on police suicide. These were previously addressed in the non-scientific literature and involved allegations of poor police practices and judgment, drug trafficking, and even murder as possible precipitants in cases of police suicide. Of course, it would be obtuse to believe such problems were indigenous only to the United States.

France

French sociologist Frederique Mezza-Bellet found police to be the most suicide-prone occupation in France during a three year study. He found that, on the average, a police officer committed suicide every nine days with the majority using their service revolvers. The major reasons cited in the study were low pay, stress, public hostility, and a lack of resources (Law and Order, 1996, April). The method and causal factors are also found in studies of suicide among American police officers.

Occupational Comparisons

Several researchers have conducted studies regarding differences between police suicides and self-inflicted death among other occupations. Like previous findings, the results of such

comparisons are often in conflict with some reporting a much higher likelihood of suicide among

police officers while others find that police officers are not at an increased risk. The major

studies are included in Table 4, followed by a synopsis of each.

Table 4. Occupational Comparison of Suicide

Researchers	Date
Labovitz and Hagedorn	1971
Richard and Fell	1975
Bedeian	1982
Vena, Violanti, Marshall, and Fiedler	1986
Violanti, Vena, and Marshall	1986
Boxer, Burnett, and Swanson	1995
Violanti, Vena, and Marshall	1996

Labovitz and Hagedorn (1971)

This research attempted to link occupational prestige, as reflected in the NORC

prestige scale of 1947 with 1950 suicide rates. Earlier studies seemed to indicate that

these two variables were somehow related; however, Labovitz and Hagedorn found an

extremely low relationship.

The majority of the information in this study is not pertinent to the discussion at hand

and the NORC prestige rating scale is not fully explained although the score of 41 for

police officers is in the lower 50 percent of the 36 occupations examined. It does appear,

though, that this score is above the majority of service industry workers. A notable

finding is the police suicide rate of 47.6 reported by the National Office of Vital

Statistics. This rate is second only to self-employed and manufacturing managers who had a NORC prestige rating of 81—tenth in rank.

As stated earlier, Labovitz and Hagedorn found an extremely low relation between occupational prestige and suicide rates. Given this, it is suggested that other characteristics may prove more useful in predicting suicide rates; however, these researchers believe that detailed occupations and operational prestige rankings may improve further research in this area.

Richard and Fell (1975)

This particular study was not focused solely on police suicide but rather on health factors in police job stress, including suicide among other health issues such as hospital admissions, mental health problems, and premature death, in Tennessee from 1972 to 1974. The impetus in this research is on the relationship between psychological job stress and ill health. Police work is seen as an occupation with particularly high levels of stress due to rising crime rates, tension in the inner cities, and increasing levels of violence placing more demands on police. Media attention, conflicting roles, and hostility toward the community further compound the stress in this profession, as does the possibility of physical danger and violent nature of their employment.

Health data from death certificates, mental health centers, and general hospitals were used to compare police with other occupational groups. Police ranked third in suicide rates (69.1 per 100,000) among the occupations behind laborers and pressmen; however, this rate is based on only five suicides. Even so, these findings were consistent with those of Kroes (1976), using 1950 census data. Richard and Fell state that, "Perhaps the

violent world in which many police perform their jobs predisposes them toward the

violence of self-inflicted death as a solution to personal crises. The availability of guns,

an irreversible method of suicide attempt, may also be a significant factor" (p. 82).

Recommendations include changes in policies regarding carrying firearms, increased

periodic physical examinations, and more accessible crisis intervention resources and

techniques. Training in human relations, marital counseling, stress reduction, and even

"time-out" periods for on-duty officers, during which they could rest and talk with

effective listeners, would help reduce the stress that may lead to the health problems cited

in this study.

Bedeian (1982)

Approximately 1000 people throughout the world take their own lives everyday and

over 75 people in the United States kill themselves everyday, resulting in suicidal

behavior emerging as a significant concern. In light of this, this study examines the

available literature dealing with the relation of occupation to suicide for health care

providers, managerial and professional persons, and military and paramilitary personnel,

including law enforcement officers.

An informal consensus, according to Bedeian, appears to have arisen that the suicide

rate among police is significantly greater than for other occupations. There are some

studies that seem to indicate this but there are some that are contradictory so absolute

conclusions are complicated. Also, many reported suicide rates are based on relatively

few numbers which has a tendency to elevate the rate. For example, Nelson and Smith

(1970) reported a police suicide rate of 203.66 per 100,000 in Wyoming from 1960 to

1968 but there were only seven cases during that period. Furthermore, mortality information regarding police suicide is particularly difficult to obtain, limiting empirical data. Heiman (1975, pp. 269-270) notes, "most police departments either state they do not keep such information or if they do keep that information, they are understandably reluctant to part with it."

In reviewing the available data, Bedeian concludes that the "available research fails to provide unequivocal support for the belief that police have an unusually high rate of suicide. The results analyzed appear to be largely a function of the subgroup sampled, period of time investigated, and cultural context in which a study was conducted" (p. 214).

Of course, he acknowledges a certain degree of stress in police work, calling it a "high-stress occupation," citing "...the physically dangerous and often violent nature of their work..." (p. 219). Organization and peer pressures further add to the stress level. Pessimism and cynicism, as well as routine contact with the "behaviorally different and socially ill" create some additional issues in police work—issues that are further complicated by commonly held parochial attitudes that may prevent an officer from seeking treatment for fear of losing their jobs (Heiman, 1975). In short, Bedeian states, "certain conditions that are central to police work seem especially conducive to maladaptive behavior, if not to a disproportionately high suicide rate" (p. 219).

Recommendations include more intense pre-employment psychological screening; educational or training programs in depression recognition; the establishment of comprehensive counseling and suicide prevention programs; and referral services. More

readily available and socially acceptable mental health treatment in a supportive nature

and further research and longitudinal studies to assist with identifying potential suicidal

personnel may also reduce the number of suicides. The hope is that "...future advances

in our understanding of suicide will lead to a minimization of the number of premature

and needless deaths resulting from this cause" (p. 221).

Vena, Violanti, Marshall, and Fiedler, (1986)

This research examined and compared the mortality of municipal workers in Buffalo,

New York between 1950-1979, with an emphasis on the long-term health risks associated

with the high stress of law enforcement. Mortality rates for specific causes were

calculated for police officers and compared with the same rates among all other

municipal employees.

The mortality rate from all causes among police officers was comparable to the

expected rate based on the general Caucasian male population. There were slightly

higher mortality rates for all malignant neoplasms and lower than expected mortality for

all infectious and parasitic disease; however, the standard errors of the rates indicate that

the difference is not significant.

More important to the discussion at hand, are the comparative suicide rates. "The

only death rate for policemen that was significantly elevated was suicide, with policemen

exhibiting almost three times the rate of other municipal employees" (p. 386). Of course,

there is a lack of definitive evidence for this. There were no measures of stress among

the police officers in the study and any reason would be merely speculative; however,

this finding "...indicates that we must vigorously attempt to identify any predisposing risk factors for this tragic and preventable cause of death" (p. 396).

Violanti, Vena, and Marshall, (1986)

These researchers used the data from the previous study in an examination of disease risk and mortality among police officers and many of the findings were repeated. The title reflects the focus of the article but there were additional considerations presented regarding the suicide rate for police officers, calculated at almost three times that of other occupations. The authors added that suicide is generally much lower in a worker population than in the general population; however, this is not the case with police work. This is seen as a possible indication of an occupation-specific problem in policing. It must be noted though, that these statistics are based on only 11 observed suicides over this 30-year period.

Boxer, Burnett, and Swanson (1995)

Boxer, Burnett, and Swanson reviewed English language epidemiological studies on suicide and occupation published since 1982. There is an acknowledgment that the workplace has many stressors such as work overload, harassment, and threats to job security which may influence suicide rates. Clearly, elevated rates in a particular occupational group may result from a complex interaction between work stress, access to means, and other risk factors such as gender, age, and the presence of a mental disorder.

Many articles on police suicide commonly cite high suicide rates as evidence of job stress, but several studies have yielded conflicting results (McCafferty, McCafferty, and McCafferty, 1992). Moreover, the studies that suggested a high risk of suicide have been

questioned on methodological grounds (Bedeian, 1982). Indeed, Milham (1976) found a non-significant PMR, the ratio of the proportion of deaths from a specific cause in an exposed group to the corresponding proportion in an unexposed group, adjusted for confounding variables. Loo (1986) found an annual suicide rate among the Royal Canadian Mounted Police to be about half that of age-matched males and Vena et al (1986) found that the standardized mortality rate among police officers in Buffalo, New York was not significantly elevated compared to the national population. Another study found that the PMR for suicide among law enforcement officers was not significantly higher than expected when compared to other occupations, physically dangerous occupations, shift work occupations, or others in their social class (Hill and Clawson, 1988).

The inconsistencies in the various studies of police suicides preclude firm conclusions and numerous factors influence the suicide rate. Meaningful comparisons were not made in this study although an analysis of deaths by suicide among white males by the National Institute for Occupational Safety and Health showed that the five occupations with the highest odds rations were psychologists, pharmacists, physicians, securities and financial service sales occupations, and lawyers. Of course, these were preliminary findings and it is unknown where law enforcement officers would rank.

Violanti, Vena, and Marshall, (1996)

This study was also conducted on police officers and other municipal employees in Buffalo, New York, but the time period was longer, now covering the period 1950-1990. The focus is on the comparative risk assessment between suicide, homicide, and

accidental death among police officers which is then compared to such risks for other municipal employees. Prior to this study, there was little empirical research in this area for police officers and no occupational comparisons of such risks.

The results of this study are reflected in Table 5 and reveal that police officers had a suicide rate over eight times that of homicide and approximately three times that of accidental deaths. The suicide rate for other municipal workers was three times that of their homicide rate, however, the accidental death rate was almost five times that of suicide. In comparison, police officers had a suicide rate nearly twice that of other municipal workers but were slightly less likely to be victims of homicide. Further, municipal workers had an accidental death rate more than eight times that of police officers, despite the prevailing beliefs that police officers frequently engage in high speed vehicles chases, have a higher potential for accidental shootings, and are often in more dangerous situations than other occupations.

Table 5. Suicide, Homicide, and Accidents Among Police Officers and Municipal
Workers: Buffalo, New York, 1950-1990

Occupation	Suicides	Homicides	Accidental
Police Officers	25	3	8
Municipal Workers	13	4	67

Based on these findings, suicide may be considered a potential risk to officers, greater than the potential for homicide and accidental death combined. This is supported by the findings on the cause of death reported for police officers in the introduction. Possible reasons for this increased risk of suicide include access to firearms, shift work, social strain, criminal justice inconsistencies, a negative police image, and continuous duty exposure to death and injury (Labovitz and Hagedorn, 1971: Nelson and Smith, 1970), among other reasons previously cited.

Despite evidence of increased suicide risk, there is a lack of emphasis on the problem in training and prevention programs. Violanti et al. make several recommendations toward this end and hope that this study is an initial step in recognizing that suicide is an actual problem in law enforcement.

Other Scientific Reports

Hill and Clawson, (1988)

Hill and Clawson examine the health hazards of "street level" bureaucracy in this study of mortality among the police. Relying on data of occupational mortality in Washington state for 1950-1971, the age and cause of death were obtained for each of the approximately 300,000 white males who died during that period. Sixty-seven different occupations were identified for comparisons, based on criteria of at least 500 deaths. It was assumed, based on common perceptions and other research, that the personal risks inherent to policing and the organizational role and stress associated with this profession, that there would be a higher mortality rate among the police than other occupations.

Such variables as social class, role ambiguity, organizational tension, shift work, and the physical danger or hazardous nature of the job were evaluated.

In light of the perceptions and research on policing, it is implied that the police should die at a significantly younger age but this research reveals that there is less than a year difference in the average age of death for police compared to all other occupations. Moreover, police are less likely to die of accidents than the average male but they have a higher probability of committing suicide and are considerably more prone to die by homicide. Of the 1586 police deaths in the data, 40 were by suicide and 15 were feloniously killed.

In analyzing the data, Hill and Clawson concluded that physically dangerous occupations do not have considerably lower average ages of death but there is a higher number of accidental deaths. There was no evidence that police officers were significantly different than other dangerous occupations, although there was a lower accidental death rate and a higher suicide rate found. Shift workers were found to die at younger ages than nonshift workers, with a difference in average life span of nearly two years. Again, police officers did not appear to fare worse than other shift workers.

Comparisons by social class found, unsurprisingly, that those in the highest quartile lived and average of two years longer than those in the lowest quartile; however, police are indistinguishable from others of their class in this regard. Predictably, those in the lower classes had more accidental deaths but police were not found to be remarkably different from others in their class. Higher-class men were found to be more likely to kill themselves but less likely to die from homicide when compared to lower classes. In this

regard, police officers had notably higher rates of both homicide and suicide than others in their class.

Of course, there is nothing to definitively explain this occurrence. The authors speculate that, " The relatively high risk of death by homicide may be a notable cause of psychological stress, and the relatively high suicide rate may be a symptom of such stress" (p. 247).

Janik and Kravitz, (1994)

Janik and Kravitz reviewed the records of 134 police officers that were referred to them for fitness-for-duty evaluations to determine possible contributing factors in those who admitted to suicide attempts. These evaluations are conducted when questions are raised regarding an officer's physical, mental, or emotional ability to perform his or her duties and are not solely associated with suicidal gestures or attempts.

The variables examined included suspensions from duty, citizen complaints, marital problems, administrative harassment, years of service, age, gender, and race. Cumulative stress (which reflects chronic maladaptation to stress) and problematic substance (alcohol or drug) use were also examined. Understandably, these variables are fairly representative of the causal factors cited in the majority of research regarding police suicide. Among the reasons leading to the referral, officers most often identified marital problems, alcohol, administrative harassment, drugs, and cumulative stress.

Janik and Kravitz divided the subjects into categories based on whether or not there was an admission of attempted suicide. Marital problems and duty suspensions were strongly associated with reported suicide attempts with officers reporting marital

problems 4.8 times more likely to attempt suicide. If any duty suspension was reported, the odds of a suicide attempt were 6.7 times higher, compared with officers who had not attempted to take their own life. There was also a trend for more reports of citizen complaints among those who had made suicide attempts.

Interestingly, perceived administrative harassment was not linked to any suicide attempt in this study although such stress is often cited as a causal factor in other studies. Likewise, alcohol and drug use were not found to be significant factors in suicide attempts, contrary to much of the research. One must remember, however, that the officers in this study were required to participate so their interaction with the researchers may have been influenced accordingly.

Stack and Kelley, (1994)

In light of inconsistencies and shortcomings characteristic of research on police suicide, such as the lack of appropriate comparison groups, small sample sizes, and local and regional variations in suicide, Stack and Kelley examine data on suicide extracted from the 1985 National Mortality Detail File. This was the first coordinated effort at collecting a national database on occupation and suicide in over 35 years and contained data from all 16 states reporting occupational status of the deceased. These states were Colorado, Georgia, Kansas, Kentucky, Maine, Missouri, Nebraska, Nevada, New Hampshire, Ohio, Oklahoma, Rhode Island, South Carolina, Tennessee, Utah, and Wisconsin.

The suicide rates of police officers were compared to male, age matched groups and other suicide predictors such marital status, age, gender, and race were controlled for.

The calculated suicide rate for police officers was 25.6 per 100,000 which was slightly higher than the age matched control group which was calculated at 23.8. The national average was only 12.3 but a comparison is misleading because the national average include females with a suicide rate of only 5.1 and persons younger than 15 years of age who have a rate of near zero. Females are not well represented in police work and there are no persons under 15 years of age within the profession.

A multivariate analysis reveals that police officers do not have significantly different odds of committing suicide than other persons in the labor force, when other variables are controlled for. These findings clearly undermine the common assumption that police have a high suicide rate and may be more reliable as these numbers are based on a national sample rather than local departments. Stack and Kelley do include the disclaimer that the statistics are subject to underreporting and may underestimate the actual suicide rates.

Karel, (1995)

Karel contradicts the assumption that job stress is a primary precipitant in police suicide. He cites, among others, Dr. Herbert Hendin of the American Suicide Foundation, who says, "There's some question whether there is a real problem. It is not an established fact that police officers have a higher suicide rate than others in their demographic group" (p. 7). Hendin believes that the majority of past studies have not indicated that police suicide rates were significantly higher than the comparable population but that the assumption remains intact because it adds a degree of drama to the law enforcement career.

In fact, the stressful nature of police work is often portrayed as a primary factor in media accounts of police suicide. Hendin also postulates that a "political element" may exist in continuing to cite stress as a major causal factor and in reporting much higher suicide rates than other occupations. He sees this as a way of demonstrating that the job is difficult and dangerous and, in his view, this provides a basis for union representatives to seek higher salaries and improved health benefits.

In support of these perspectives, he refers to Ivanoff's survey of New York City police officers that indicated that the officers themselves did not perceive stress as a key cause of police suicide. Depression, relationship problems, and access to firearms were the primary contributing factors. Additionally, Dr. Archibald, the director of the NYPD Psychological Services Unit, states that, "…the immediate precipitant is usually something in their personal lives" (p. 13).

The purpose of questioning the common belief that police officers kill themselves at higher rates than members of the general public or other occupation and that stress is the primary cause is not to minimize the significance of suicide among police officers, but to ensure the preventive efforts are appropriate. The medical director of the mental health services section of the managed care company that cares for all of the New York City employees believes that studies should control for covariates other than occupation. Controlling for such variables as age, sex, race, and gun ownership provides a more reliable and valid suicide rate for comparisons. He further states, "…I think we get too caught up with whether the suicide rate is higher or lower than the general population," rather than developing proper preventive interventions" (p. 7).

The Stress Connection

The majority of the literature indicates that stress is a precipitating factor in many police suicides. In fact, Kroes (1976) states that the suicide-stress relationship is "self-evident" based on the assumption that if certain occupations have higher suicide rates, it is safe to suggest that there are significant stressors related to that job. Again, there is some question as to the validity of this assumption but the sheer volume of research suggests it is worthy of rumination. In addition to the findings in the previously reviewed literature, there are several efforts that focus solely on stress as a causal factor in police suicides (Table 6).

Table 6. Studies in Stress and Suicide

Researchers	Date
Territo and Vetter	1981
Terry	1981
Lester	1983
McCafferty, McCafferty, and McCafferty	1992
Cummings	1996

Territo and Vetter, (1981)

These researchers state that policing "...is highly stressful, since it is one of the few occupations where an employee is asked continually to face physical dangers and to put his or her life on the line at any time. The police officer is exposed to violence, cruelty, and aggression and is often required to make extremely critical decisions in high-pressure situations" (pp. 195-196). This stress is then manifested in physiological and

psychological disorders with alcoholism, broken marriages, and, "...in the extreme, suicide" (p. 196).

Job stress is then categorized and indicators are examined. Germane to this discussion is the suicide rate among police officers. Territo and Vetter divide police suicide into two broad categories based on age. Suicide among younger officers is viewed as rather uncommon but is frequently associated with divorce or other family problems, when it does occur. Among older officers, such issues as alcoholism (also an indicator of stress), physical illness (another indicator of job stress), and impending retirement are believed to precipitants. There is, however, little evidence provided to support these findings.

Among the research cited, there is a finding that male police officers are more likely to kill themselves than men in other occupations (Lester, 1978) and that "...the most upsetting problem for the suicidal officer is his marriage" (Danto, 1978). Neither of these studies provides direct evidence of the above findings, although, in the latter study, the police suicides were characterized by married officers in their late 20s, so there is a possibility that marital problems was a precipitating factor in the death of these relatively young officers.

This article also provides some insight into the stressors encountered by police administrators and police families, unique positions and people with unique problems, in the eyes of the authors. As with much of the research on job stress, it is arguable whether the stressors of police officers, police administrators, and police families are that much different than other occupations. For example, Territo and Vetter, refer to the upward mobility of police administrators and the possibility that, "...an individual often must

sacrifice family relationships for career goals..." (p. 201). Further, "...each promotion brings with it more responsibilities for the individual over wider ranging areas and increased numbers of subordinates" (p. 201). This is hardly a situation unique to police work.

As for stress and the police family, such issues as marital problems and shift work are presented as problem areas. Undoubtedly, these issues are problems for some officers, but not for all. Moreover, these issues and others such as emotional hardening and emotional exhaustion, are not unique to law enforcement. Firemen, paramedics, doctors, nurses, social workers, and clergymen are but a few examples of occupations faced with the possibility of these problems.

Without question, stress is present in every officer's life and some react to it differently than others. Indeed, it may be a precipitating factor in some police suicides but it is uncertain that it is the primary cause. Nonetheless, the recommendations for stress reduction in police officers, police administrators, and police families are not without merit. Employee assistance programs, organizational changes, improved screening of applicants, and further training could have a positive and lasting impact on law enforcement. "Hopefully, it will result in the reduction of alcohol-related problems, suicide, marital and other family problems, and premature retirements. In the final analysis, the police officer, his family, and the organization will be the beneficiaries" (p. 207).

The research in this study is aimed at determining whether police work is stressful and, if so, the extent to which it is. Secondly, it seeks to examine the physiological and psychological effects of the police stress. It is often assumed that police work is particularly stressful, subsequently causing the onset or acceleration of these physiological and psychological problems. It is further assumed that other problems such as marital discord, alcoholism, and suicide are unequivocal evidence of the extremely high levels of stress endured by law enforcement officers. Terry seeks to prove or disprove these assumptions.

Terry provides a great deal of general information on stress and some occupational comparisons that were addressed earlier in this paper. Physiological effects and other effects of police stress are examined. Two of the aspects most often linked to stress among police officers are marital problems and high suicide rates. Obviously, our concern is with the latter and the empirical inquiries that have focused on it.

High suicide rates among police officers have been reported in various studies, i.e., Friedman (1967), Heiman (1975), and Nelson and Smith (1970). Of course, there are other studies that have found suicide rates among police officers are not significantly higher than other occupations or comparable sample groups, locally or nationally. For example, Dash and Reiser (1978), Bedeian (1982), and Loo (1986) have all reported lower suicide rates among police officers in comparisons with other groups.

Similar to many of the other studies, there is the almost obligatory explanation of problems associated with the research such as the lack of accurate records, the unavailability of records, and the lack of cooperation among police departments in

unavailability of records, and the lack of cooperation among police departments in releasing such information. Despite these and other problems, the tendency is to assume that law enforcement is an occupation fraught with high levels of stress and that this stress is manifested in a high suicide rate. Terry counters these assumptions saying it is not clear whether police suicides are the result of police stress or the consequence of other variables. "Whether a police suicide is the result of police stress, personal problems, (such as marital difficulties), or such variables as social class requires careful analysis" (p. 71). Which is the more important variable and what, if any, is their relationship to the stress associated with policing? Clearly, attributing causality to stress is problematic, as other matters must also be considered in future research.

Lester, (1983)

Lester provides some insight on the growing concern over stress among police officers in this article. He comments on the perception of high suicide rates, rampant divorce and alcoholism, and stress-related illnesses such as heart disease and ulcers. This has become such a "hot" topic that Police Chief magazine devoted two complete issues to stress and its consequences and it was the topic of panel discussions at the convention of the Academy of Criminal Justice Sciences. The overwhelming majority of articles indicate that stress is directly linked, if not fully responsible, for the problems mentioned above.

Of course, not everyone is convinced. Dr. Lorinskas of the University of Wisconsin questioned whether the emphasis on police stress might be prompted by research groups seeking to stimulate government interest in awarding grants rather than an actual

problem. In his view, the emphasis on improving police-community relations was fading and social scientists may view stress as a new area of federal concern.

Certainly, though, there is some degree of stress within policing but is it greater than that encountered by others? Furthermore, is it possible to measure and compare stress among police to other occupations? Lester cites, as examples, miners who may be trapped underground or teachers who may encounter hostility among their students and questions whether the stress police face is greater. The conclusion is that there are stressors in any occupation and they cannot necessarily be compared.

It is far easier to analyze the effects of stress among law enforcement officers, but even this is subject to contrary findings. Divorce, for example, is often claimed to be higher among police officers although there is no definitive evidence to this effect. Studies have shown that police officers were no more likely to be divorced than men in other occupations and one survey of the Los Angeles Police Department found fewer divorces among the officers than in the general population. Alcoholism is also claimed to be inordinately high among police officers, but again, there is no evidence of this.

High suicide rates may be the only evidence that police may suffer from undue stress but even this questionable. Perhaps there are other, more crucial, factors than stress that precipitated the suicide. Why do some officers succumb to this escape mechanism while others appear to deal with the same situations, possibly even thriving on the challenges?

Assuming that stress is problematic, the sources are as varied as the location, the department, the duties, and the individual officer. There are many stressors listed in research on the subject but other occupations undoubtedly have their own stressors. In

fact, many of the stressors in police departments may be present in other occupations. Finally, it is possible that police may not be under any more stress than others. It may be that it is nothing more than a myth created by social scientists hoping to reap the financial rewards associated with it.

"The danger in creating an erroneous myth of police stress is that it may become a self-fulfilling prophecy. If policemen read how unhappy officers are, then police officers may come to view themselves as more unhappy. The focus on police stress may cause officers to attend to possible stresses more, increasing the stress for them" (p. 190). McCafferty, McCafferty, and McCafferty, (1992)

The authors analyze stress and suicide within police officers, aspiring to establish a pattern of causation and treatment that can be applied to other stressful occupations. Like many other studies, there is an assumption that police work is extremely stressful and that there is a reasonable expectation of higher suicide rates than in those occupations of lower stress. Hill and Clawson (1988) state, "Most people consider police work an occupation with a significant degree of stress, which is consequently reflected in a higher suicide rate than in other more mundane occupations" (p. 243).

This study provides an in-depth enumeration of the problems that have been attributed to the stress associated with police work. Ellison and Genz (1983) submit that police officers, more so than others, suffer from the following due to higher levels of stress:

1. Suicide
2. Marital and family problems
3. Isolation from friends
4. Alcoholism
5. Unnecessary risk taking
6. Sexual problems ranging from impotence to promiscuity

7. Callousness
8. Criminal behavior
9. Unnecessary violence in dealing with citizens

As revealed in previously discussed research, there is some evidence to contradict some of these claims and there is obviously some variation among different departments and individual officers. Clearly, the effects of stress are dependent upon many factors and may be less important than the causes of stress.

Kroes and Marrell (1975) offer some insight into the causes of stress of the beleaguered police, under siege from criticism and complaints by citizens, the judiciary, attorneys, and even their own administrators and fellow officers. Low pay, shift changes, work overload, poor diet, poor equipment, and a feeling that his work accomplishes nothing may also add to the stress level. Additionally, there is a lack of career development, inadequate rewards and reinforcement systems, vicarious liability laws, excessive paperwork, and organizational politics. The ineffectiveness of the corrections system, unfavorable court decisions, media distortion of police and cases, allegations of brutality and racism, and role conflict, as well as other aspects such as fear and danger may further add to the stress on police officers.

Continual exposure to these and similar stressors requires the officer to use all of his coping mechanisms. Over time, these adaptive methods may fail with tragic results such as the incidence of suicide. (Again, there is contradictory evidence regarding the suicide rate among various departments at different times and problems in obtaining information on the topic so accurate numbers are impossible to obtain. Nonetheless, there is an

assumption among many people that police are more prone to suicide.) The issue, then,

becomes stress management as a method of reducing the occurrence of police suicide.

The authors provide several techniques to reduce the problems attributed to stress as

well as corrective measures for some of the aspects perceived as adding to the stress

levels of police officers. Obviously, police administrators and supervisors must take an

active role, but the individual officer also has some responsibility in managing his or her

stress. Law enforcement officers may have more of a risk than the average person for

suicidal tendencies and "...the police officer should be the most psychologically stable

and mature individual available and attainable. Early recognition, identification, and

treatment of the stressed police officer is imperative to reduce the morbidity and

mortality of this occupational strain. Treatment methods that are applicable to police

officers may also be applied to individuals in other stressful occupations" (pp. 242-243).

Cummings, (1996)

Cummings is a police supervisor in Florida and prepared this article to reemphasize

the need for "awareness, intervention techniques and prevention programs, while

considering characteristics and practices that end the lives of hundreds of law

enforcement officers every year" (p. 85). He refers to the recent media attention on

police suicides which would lead one to believe that self-inflicted death among police

officers in on a tremendous rise around the United States. Of course, he indicates that

police officers have been killing themselves, probably since the inception of policing as

we know it.

The reason for police suicide is the issue that must be addressed. "Does the job stress affect an officer's life so much that suicide simply becomes an occupational hazard, or is there something about law enforcement that makes suicide the only honorable way out when life gets too tough?" (p. 86) Cummings says, "The answer is a definite yes, no, and maybe" (p. 86). Those left behind seldom understand the suicide and the information available on the subject is limited as well as often contradictory. As indicated earlier, data collection is problematic and the majority of research has been done on specific departments with none of national scope.

In many of these departmental studies, job stress has been the focus of police problems and suicides. There is some evidence to this effect, albeit contradicted in other research. The interaction with the criminal element, potential dangers of the job, and the aspects of policing so often portrayed in the news and entertainment industries such as vehicle chases, gunplay, and felony arrests, are not seen as the cause for stress in many officers. Most were aware of these aspects and possibly prepared for worse because of the media's portrayal. The organizational politics, boredom, poor equipment, and other aspects appear to be much more problematic for many officers.

Ivanoff (1994) asked police officers to list the factors they believed to be most highly associated with suicide and these included: depression, relationship conflicts or losses, easy access to firearms, drug abuse, financial difficulties, and alcohol abuse. In another study, Crank and Caldero (1991) surveyed police officers in eight Illinois municipalities and found the police organization itself to be the most stressful aspect of their job. Within the organization, concerns over equitable treatment, shift changes, advancement

and assignment, unclear policies and rules, case loads, paper work, and peer pressure were the major contributors.

Based on this information, it is presumed that stress accumulates from numerous factors. These factors and the appropriate response or prevention technique become the focus of Cummings' work. He appears convinced that organizational, or internal, stresses are far more dangerous to the officers than the stress associated with daily police work. His emphasis is directed accordingly.

Discussion

Clearly, there are several problems associated with researching police suicide. There is no consistent, reliable method of data collection, either on the national level or state level and the majority of police departments either do not maintain such information or are reluctant to disclose it. Moreover, the overwhelming majority of studies have focused on a single department for a relatively short period of time so it may be implausible to assume similar findings among police departments elsewhere and at other times.

It is also evident that there is some inconsistency and contradiction among the various studies. For example, there are findings that police suicide rates are significantly higher than the general population, yet there are others indicating police are not at an increased risk for suicide, and may possibly have a suicide rate lower than the comparable public. Likewise, some researchers have found that the suicide rate for police officers is much higher than that of other occupations but others have found that some occupations are more prone to suicide than policing.

It is fairly well-accepted that police officers are 2-3 times more likely to kill themselves as to be killed by a criminal in the line of duty, but the actual number of deaths attributable to suicide and the suicide rate among police officers are estimations. While it is important to estimate the suicide rate and number of suicides to establish a baseline for evaluating the effectiveness of prevention programs, if nothing else, there is a potential to overemphasize this aspect over more critical issues. In short, if police officers do, in fact, have a higher suicide rate than the general population or other occupations, the reason has not been empirically demonstrated.

It is more beneficial to study this phenomenon for issues that can be targeted and acted upon in prevention programs to reduce police suicides in the future. So, what are some of these issues? The literature reveals that the majority of police suicides are carried out by male patrol officers, 25-40 years of age, typically with a firearm. This should be generally reconcilable simply on the surface. Law enforcement is still a male-dominated occupation, with a large portion of employees serving as patrol officers. Additionally, the majority of police officers are in the 25-40 years of age category and have access to firearms, as well as an intimate knowledge of their use.

There is also a general assumption, as well as a large volume of research, indicating that police work is an occupation fraught with high levels of job stress that may contribute to the number of suicides. A high percentage of researchers cite stress as the primary causal factor. Other factors that are often reported include relationship problems and the use of alcohol but even in these, there is a general tendency to relate these problems to the unique stressors of police work. Other possible reasons that are cited,

albeit in limited cases, include depression, Post-Traumatic Stress Disorder (PTSD), financial problems, the availability of firearms, and criminal conduct and other forms of misconduct, i.e., violations of departmental policies and procedures.

Understandably, the researchers' paradigms guide their efforts and the results are usually supportive of their value systems. For instance, sociologists tend to focus on the sociological reasons and issues whereas psychologists view suicide as a result of something in the officer's psychological makeup. Practitioners often point to issues they would like changed such as departmental politics, bureaucracy, stress, and so on. Many also cite the continual danger a police officer deals with as well as their almost constant interaction with the public.

There are few concrete conclusions that can be drawn regarding police suicide. With the exception of the general characteristics of the officers identified above (white, male, 25-40 years of age, using a firearm), few variables are consistent throughout the literature and one study seemingly refutes another. Additional research is clearly needed and mandatory data collection and reporting, on a national level, will improve the validity and reliability of the findings.

CHAPTER 3

METHODOLOGY

DATA COLLECTION

This study examined newspaper articles pertaining to police suicide for the purpose of a content analysis. The articles were selected from four databases: Newspaper Abstracts, New York Times, Data Times, and Westlaw (United States Newspapers) and covered the period of 1 January 1996 through 1 October 1998.

In the first three databases, the terms "police" and "suicide" were linked whereas in the Westlaw search, the terms were defined as "police" and "suicide" in the same paragraph. This change was implemented upon the recommendation of the Westlaw Helpline to produce a more manageable caseload.

To ensure meaningful data was not lost due to this change in search terms, "police" and "suicide" were used in Westlaw for a one-year period and indicated that the change did not negatively impact on the pertinent results--there were no additional cases revealed. Other search terms such as "cop," "officer," "trooper," and "sheriff" were also linked with "suicide" in each database but did not produce any additional cases.

In total, 19,255 article abstracts were screened to determine appropriateness, meaning that the article actually pertained to the suicide of a law enforcement officer rather than the officer's actions or statement in regard to a suicide carried out by someone other than a police officer. A manual reading of each abstract was necessary to ascertain its applicability to the research, and produced a total number of 319 newspaper articles related to police suicide. Of these, there were only 82 individual cases of police suicide.

Many of the articles were indexed in two or more of the databases and there was some redundancy in reporting where several different news sources carried the story. Such duplications were culled out so that each of the 82 cases is reported only once in this study.

The majority of the excluded articles pertained to non-law enforcement suicides. In these, the police response, actions on the scene, or statements regarding the suicide were emphasized, resulting in a "hit" during the search. Also excluded were those cases citing the suicide of a former police officer as well as those of officers from other nations.

CODING INSTRUMENT

The coding instrument (Appendix 1) was designed to encapsulate the greatest number of officer characteristics related to the self-inflicted death. Twelve distinct variables were explored to establish any recognizable trends as far as time period, location, or a particular department, as well as the general characteristics of the officers who chose to kill themselves. Additionally, it was hoped that patterns of causation could be determined.

The year, state, and particular department in which the suicides occurred were recorded. Likewise, the officer's rank, gender, age, years of service, and the method used were recorded. Perceived reasons or causal factors, the documented use of alcohol, and the presence of the phenomenon of murder-suicide was also chronicled. In those cases where the primary cause was determined to be criminal activity, investigations of criminal activity, or violations of departmental policies and procedures, the specific misconduct was noted.

Detailed lists were kept from each database to ensure there was no duplication in the number of police suicides reported. While coding the data, careful attention was given to each article to ensure that each of the cases reported was, indeed, a separate incident. Multiple reports of the same incident in several sources and subsequent reports in the same source were excluded from the total number; however, these proved very beneficial in obtaining data that may have been missing in a single report.

LIMITATIONS

Clearly, a content analysis of newspaper articles has several advantages such as easy accessibility, relatively high reliability, and fairly accurate geographic representation. With regard to police suicide, this information is much more readily obtainable than the more traditional method of querying particular departments. Furthermore, it is possible to obtain a sample base across the entire nation, rather than one confined to a specific department or state.

Of course, there are some limitations that must be considered in this type of research. First, some of the newspapers provided more general information regarding police suicide while the coding sheet was designed to capture a specific set of variables. Some articles would report a specific suicide in limited detail but provide a great deal of information regarding police suicide in general terms. For example, an article would report a suicide within the New York Police Department and then discuss their efforts at reducing the number of suicides.

Related to this is a second limitation, the unavailability of all of the desired variables in a newspaper account. The researcher can only access the data the media determines to

be significant to the report. For instance, the officer's age or years of service may be excluded from the account. Causation and the presence of alcohol or drugs may be especially difficult to ascertain. It is assumed that the police-media relationship has some bearing on the information reported as many of the articles indicated that department spokespersons had "no comment" when questioned about a suicide. It is not unexpected, then, that some data would be unattainable.

Obviously, a more detailed examination of these cases would result if applied to further study utilizing departmental personnel files, medical files, coroner's reports and so on. Nevertheless, while the media accounts of police suicides may not be fully encompassing, it is believed that it is fairly representative of the phenomenon. Additionally, previous research efforts has demonstrated that studies using personnel files, medical files, and other official documentation is problematic and is often met with reluctance among police administrators.

In light of these issues, the use of mediated data and the employment of a quantitative content analysis will reflect, in part, what these media sources deem significant and what information they are provided by the police. The ways in which news is constructed and presented may preclude a richer understanding of suicide among law enforcement officers as well as having a negative impact on preventive practices and programs. As such, quantitative analyses can only capture the phenomenon as perceived by the media. Thus, studies such as this must be supplemented by future research that examines not only numbers and characteristics, but also the underlying attitudes and paradigms regarding police suicide.

CHAPTER 4

FINDINGS

GENERAL CHARACTERISTICS

This study produced 82 unique cases of police suicide between 1 January 1996 through 1 October 1998, from a total of 319 newspaper articles referenced in the four databases. Newspaper Abstracts accounted for 19 cases, New York Times reported 12, Data Times described six, and Westlaw (United States Newspapers) detailed 45 cases of suicide among law enforcement officers. Thirty-one cases were reported, to date, in 1998 37.8 percent) with 30 cases in 1997 (36.6 percent) and 21 in 1996 (25.6 percent).

Sixty-seven different police agencies were represented in the findings, spread throughout 21 states and the District of Columbia. The states reporting five or more suicides included California (n=18; 22 percent), New Jersey (n=10; 12 percent), New York (n=8; 9.75 percent), Florida (n=8; 9.75 percent), and Massachusetts (n=5; 6 percent). These five states accounted for 49 total cases or approximately 60 percent of the total cases. The National Directory of Law Enforcement Administrators (1997) reflects that these states employ 65,152 sworn officers; 23,628 sworn officers; 62,646 sworn officers; 41,262 sworn officers; and 16,693 sworn officers, respectively.

The agencies represented include municipalities (small town through large metropolitan departments), county sheriff's departments, state patrol agencies, and three federal police agencies. Among the agencies reporting more than one officer suicide during this period were New York City Police Department with six cases, Los Angeles Police Department with four, and Washington, D.C. Police Department with three cases.

These departments employ 31,000 officers; 9,324 officers; and 3,615 officers respectively so that higher numbers of suicides are not unexpected. The San Diego Police Department and Boston Police Department both reported two cases of police suicide, as did Hillsborough County, Florida. These three departments were essentially the same size with 1,998 officers; 1,997 officers; and 1,776 officers, respectively. Interestingly, Clinton County, Missouri also reported two police suicides however, this department only employs 13 full-time sworn officers (National Directory of Law Enforcement Administrators, 1997).

POPULATION

Slightly more than 67 percent of the suicides were patrol officers (55 cases) which was expected because the majority of police officers nationwide are assigned this rank. The remaining rank structure common to most police departments was also represented. Officers in the rank of detective accounted for six suicides (7 percent) while seven sergeants killed themselves (8.5 percent). Five lieutenants (6 percent) and seven captains (8.5 percent) also died as the result of self-inflicted injury. The remaining two cases were department chiefs (2 percent). The first was a municipal chief with 44 sworn officers and the other was a county sheriff with a force of 100 officers (National Directory of Law Enforcement Administrators, 1997).

Expectedly, the majority of the police suicides were male officers (n=75) equating to almost 92 percent of the total. Among the seven female police officers that killed themselves, five were patrol officers (approximately 72 percent), one was a detective (14 percent), and the remaining officer was a captain (14 percent).

The method used was also as anticipated with 79 suicides attributed to firearms, equating to approximately 96 percent of the total. The remaining cases included one officer who hanged himself, one officer who killed herself in a car crash, and one officer who committed suicide by asphyxiation using carbon monoxide.

Age was not reported in five of the 82 cases; however, in the 77 remaining cases, the mean age of the officers involved was 38.3. The range was from 22 years of age to 62 years of age and the mode of 28 years of age. The age group, 22 to 32 years of age accounted for almost 39 percent of the cases and over 66 percent of the total cases were in the 22 to 42 years of age grouping (n=51).

In examining the officers' years of service, the total time as a police officer was used rather than his or her time with a particular department; however, in nine cases the officer's years of service was not reported. In the other 73 cases, the mean was approximately 12 years, ranging from 1 to 29 years of service. The mode was four years of service.

Based on this study, the police officer that committed suicide can be characterized as a male patrol officer, approximately 38 years of age with 12 years of police service and uses a firearm to complete the suicide. Other factors such as the presence of alcohol and causation are somewhat more difficult to ascertain.

The presence of alcohol as a contributing factor was only reported in four cases (less than 5 percent). Of course, one cannot discount its presence in more cases simply because it is not reported more frequently. It may be far more common than reflected in

this study and the lack of information in the newspaper articles may be attributed to an editorial decision or simply an inability on the writer's part to gain such information.

The primary cause was not reported in 30 cases. In some cases, there appeared to be no known reason. Family members, friends, coworkers, and departmental spokespersons could offer no explanation for the suicide. In other cases, the lack of information regarding the cause of an officer suicide appeared to be reluctance on the investigating department's part to release information regarding the incident.

In the 52 cases where a primary causal factor was documented, relationship problems were cited most frequently (n=19; 36.5 percent). Criminal charges or investigations into criminal activity were reported as the principal causal factors in 11 cases (21.2 percent), followed by depression in 5 cases (9.6 percent), and unspecified personal issues in 4 cases (7.7 percent). Job stress was cited in only three cases (5.8 percent) as was post-traumatic stress disorder (5.8 percent) and departmental violations (5.8 percent). Physical ailments and financial problems were each reported as attributing factors in two cases (3.8 percent each).

The incidence of murder-suicide is reported in 12 of the 82 cases. This indicates that this particular phenomenon occurred in almost 15 percent of the cases studied. Moreover, 8 incidents (67 percent) of the murder-suicides are found among the 18 cases where relationship problems were cited as the primary causation. Because of the sensationalism surrounding such incidents, it is doubtful that it would go unreported so it is assumed that this is a fairly accurate number, in contrast to the presence of alcohol.

DESCRIPTIVE ANALYSIS

The following variables were entered into a data table and subjected to descriptive analysis: method, incidence of murder-suicide, presence of alcohol, causation, and specific misconduct (for those cases where causation was reported as criminal activity or departmental violations).

Method of Suicide

Seventy-nine of the officers who killed themselves did so with a firearm of some type, equating to over 96 percent of the cases in this study (Table 7). Due to limitations in the mediated accounts of each case, it was not possible to ascertain the number of cases wherein the service weapon was used, although only four of the cases indicated a weapon other than the primary duty weapon (5 percent). In many cases, the duty weapon was specified but it was not reported consistently enough to maintain statistical confidence. It is probable, however, that the majority of suicides were completed with the use of the officer's service weapon.

Table 7. Method Used in Police Officer Suicides

Method	Frequency	Percent
Firearm	79	96.34%
Car Crash	1	1.22%
Hanging	1	1.22%
Asphyxiation/Carbon Monoxide	1	1.22%
Total	82	100%

Murder-Suicide

The incidence of murder-suicide was reported in 12 of the 82 cases in this study (Table 8). This equates to an occurrence in almost 15 percent of the total cases. In the majority of these situations, the murder victim was the significant other (current or former) in the officer's life although one case involved a city councilman who had initiated a criminal investigation against the officer. Another case was actually a double murder-suicide wherein an officer who had been suspended pending a criminal investigation killed two superior officers.

Table 8. Incidence of Murder-Suicide in Police Suicides

Presence of Murder-Suicide	Frequency	Percent
Yes	12	14.63%
No	70	85.37%
Total	82	100%

Alcohol Use

The presence of alcohol as a contributing factor was documented in only four cases in this study (Table 9). Conversely, it was not reported as a factor in over 95 percent of the cases; however, one cannot conclude that this is an accurate representation. It is more probable that it was a factor in more cases than this but that the information was either unverified at press time or withheld by the investigating department for reasons cited previously.

Table 9. Presence of Alcohol in Police Suicides

Alcohol Present	Reported Frequency	Percent
Yes	4	4.88%
No	78	95.12%
Total	82	100%

Causation

As related previously, primary causation (Table 10) was documented in only 52 cases and the reason most often cited was relationship problems, accounting for over 36 percent of the cases reporting causation. This factor and criminal activity of some variation accounted for almost 58 percent of the cases. Depression accounted for over 9.6 percent and unspecified personal issues accounted for an additional 7.69 percent. Post-traumatic stress disorder, job stress, and departmental violations comprised only 17.3 percent combined. Financial problems (3.85 percent) and physical ailments (3.85 percent) were cited as primary causation in the remaining cases.

Table 10. Primary Causal Factors in Police Suicides

Primary Causal Factor	Frequency	Percent
Criminal Activity/Investigation	11	21.14%
Departmental Violations	3	5.77%
Depression	5	9.62%
Relationship Problems	19	36.54%
Unspecified Personal Issues	4	7.69%
PTSD	3	5.77%
Physical Ailment	2	3.85%
Job Stress	3	5.77%
Financial Problems	2	3.85%
Total	52	100%

Specific Misconduct

In those 14 cases in which criminal activity, criminal investigations, or violations of departmental policies and procedures were reported as the primary causal factors, efforts were made to ascertain the specific misconduct. This information was then analyzed and grouped into sex offenses, personnel violations, misdemeanors or violations, and felonies (Table 11). Eight of the cases involved some type of sex offense while two cases involved personnel violations, two involved misdemeanor offenses or violations, and two cases involved a felony offense.

The misdemeanor offense was shoplifting and the other incident in this category involved a traffic accident with injuries. The traffic accident involved an off-duty officer who had been drinking prior to the accident. He killed himself on the scene with his duty weapon while the investigating officers were completing the accident report. The two felonies included an officer who was a suspect in a burglary and another who was under investigation for fraud.

Table 11. Specific Misconduct in Cases Alleging Criminal or Departmental Misconduct

Misconduct	Frequency	Percentage
Sex Offense	8	57.13%
Personnel Violations	2	14.29%
Misdemeanor/Violation	2	14.29%
Felony Offense	2	14.29%
Total	14	100%

COMPARATIVE ANALYSIS

In this section, efforts were made to determine, through a comparative analysis, what impact, if any, the officer's rank had on the other variables. This test was followed by an examination of the effect of the officer's gender on the other variables. The last test explored the effect of the officer's age on causation.

To determine the effect of rank, the officers' ranks were coded as a dichotomous variable with "1" indicating a line officer (patrol officer, deputy, trooper, and so on) and "2" denoting supervisory personnel (detective, sergeant, lieutenant, captain, and chief). This provided a breakdown of 55 line officers and 27 supervisory personnel.

In determining the effect of age, the officers' ages were re-coded into the following year groupings: 20-29 years of age, 30-39 years of age, 40-49 years of age, and 50-62 years of age. This data was then cross-referenced against the causation variable to ascertain if certain age groups were more prone to commit suicide as the result of one particular cause over another.

Rank Comparisons

Method

The first comparison consisted of a chi-square test exploring the impact of rank on method. It was previously determined that approximately 96 percent of the suicides were carried out using a firearm and similar results were found in this test. Fifty-three of the 55 line officers killed themselves using a firearm (96.36 percent) and 26 of the 27 supervisory personnel used a firearm (96.30 percent). Additionally, these findings

basically mirror the expected frequencies in the test (52.99 line officers and 26.01 supervisory officers).

The other methods used included a car crash (one line officer), a hanging (one line officer), and asphyxiation using carbon monoxide poisoning (one supervisory officer). Obviously, these cell sizes are too small to make statements about significance with any confidence.

Alcohol

A similar test was conducted to examine the impact of the officers' ranks on the documented use of alcohol. As previously discussed, alcohol was reported as a contributing factor in only four of the cases and each of those cases involved a line officer. Based on the population sample size, it was expected that one of the cases involving alcohol would be that of a supervisory officer.

Again, the cell size is too small to generalize with any confidence. For example, the lack of documented alcohol use among those suicides characterized as supervisory officers cannot be reported as evidence that alcohol was not a factor in those officers' deaths, or that supervisory officers do not use or abuse alcohol.

Causation

Continuing in this type of tests, the next consisted of examining the effect of rank on reported causal factors. Criminal acts or investigations into such acts were cited as primary reasons in the suicides of eight line officers and three supervisory officers. Departmental violations were cited as causal factors in the deaths of two line officers and one supervisory officer. Four line officers and one supervisor killed themselves due to

depression. Relationship problems were blamed in the suicide of 15 line officers and 4 supervisors. Unspecified personal issues were cited in three cases and one case, respectively, and post-traumatic stress claimed the lives of two line officers and one supervisory officer. One line officer and one supervisor killed themselves in cases where physical ailments were cited as the primary reason and financial problems also led to the suicide of one line officer and one supervisor. Job stress, which claimed the lives of three supervisory officers, apparently did not have as much impact on line officers as there were no cases of suicide among line officers wherein job stress was documented as the primary causation.

The observed distribution across the causal factors was fairly proximal to the expected frequency. Some variation was noted in the category of relationship problems where the number of line officers who killed themselves was slightly higher than expected and the number of supervisory officers was slightly lower. Variation was also noted in the area of job stress. As previously stated, job stress was not reported as the principal reason in any case involving line officers, yet it was a factor in the deaths of three supervisors. However, it was expected that this reason would have been cited in two line officer suicides and in the death of only one supervisory officer.

Specific Misconduct

In the 14 cases of criminal activity, investigations of alleged criminal acts, or departmental violations, the specific misconduct was also examined. These particular acts were categorized as sex offenses, personnel violations, misdemeanor or violations, and felonies. Efforts in this case were to determine if rank had an impact on misconduct.

Sex offenses were the most frequently cited misconduct in the study with eight total cases (five line officers and three supervisory officers). Personnel violations were cited in the suicides of two line officers as were misdemeanor offenses or violations. Felony offenses were cited in the deaths of one line officer and one supervisory officer.

The cell sizes were again too small to make any generalizations with statistical confidence; however, the number of supervisory personnel involved in sex offenses was slightly higher than expected but slightly lower than expected in personnel violations and misdemeanor offenses or violations. Conversely, line officers appeared to be represented at a slightly higher rate in these last two groupings than would be expected, but at a slightly lower rate than expected for sex offenses.

Murder-Suicide

The occurrence of murder-suicide was documented in 12 cases in this study. Nine of these cases involved line officers and three cases were supervisory officers. The expected values were eight and four, respectively so there is some slight variation. However, it is not a statistically significant difference. As in previous sections, there is a problem with statistical confidence due to the small cell sizes in this particular variable.

Gender Comparisons

Method

This test attempts to determine the impact of the officer's sex on the method of suicide, similar to the previous examination of the officer's rank on the method. As already discussed, firearms were used in 79 of the suicides in this study (approximately 96 percent). This total is characterized by 73 males (97.33 percent) and 6 females (85.71

percent). One male officer hanged himself and the remaining male officer used carbon monoxide poisoning. The remaining female officer in the study killed herself in a car crash.

These latter three methods contain cell sizes that are too small to make generalizations with any statistical confidence. While the lower percentage for females who used a firearm may indicate that they would be more likely to use an alternate method, it cannot be definitively stated due to sample size. Indeed, it may have been higher with a larger sample size. Interestingly, the number of female officers who selected a firearm as the method of suicide is still a majority and is contrary to methods generally chosen in the population at large. Whether this is attributable to the availability of firearms among female officers compared to females in the general population, the result of the female officer assuming "police officer" as a "master role" over "female," or something completely different is unknown, but worthy of future research.

Alcohol

Similar to the findings in the rank/alcohol analysis wherein alcohol was documented as a factor in the suicides of line officers only, there was no report of alcohol being a factor in the death of the female officers in this study. All four incidents in which alcohol was recorded as a factor involved males.

Once more, the cell size is too small to generalize with any confidence. The lack of documentation regarding alcohol as a contributing factor in the suicides of female police officers in this study cannot be taken at face value to indicate that it is an issue only for male officers.

Causation

Among the seven female officers who committed suicide in this study, the primary casual factor was documented in only three cases; again effecting the statistical confidence is generalizations. In these cases, however, one suicide was the result of depression and the other two involved relationship problems. Clearly, the observed frequency is not close to the expected frequency regarding this issue.

As there were no cases of suicide among female police officers in this study wherein criminal activity, departmental violations, unspecified personal issues, post-traumatic stress disorder, physical ailments, job stress, or financial problems were cited as causal factors, it is impossible to make generalizations regarding the officer's rank and causation. It is unfortunate that the sample size where causation was documented among female police officer is so small because it would be interesting to examine whether the officer's gender actually had an effect on these variables.

Specific Misconduct

As indicated in the previous section, there is no documentation that any female officer in this study was involved in situations where specific misconduct was recorded.

Murder-Suicide

The occurrence of murder-suicide is not reported in the seven cases of suicide involving female officers. Once again, this may be the result of a small sample size rather than a characteristic of male officers only, although there appears to be a tendency to relate murder-suicide with males.

Age/Causation

There were 51 cases in which the officer's age (re-coded) and a primary cause were documented. In the 20-29 years of age group, two suicides were attributed to criminal activity, one was the result of depression, and relationship problems were cited in eight cases. The 30-39 years of age group is characterized by three suicides related to criminal activity, one case linked with departmental violations, two as the result of depression, and relationship problems were cited in five cases. Additionally, unspecified personal issues and post-traumatic stress disorder were recorded as causal factors in two cases each and there was one suicide blamed on financial problems.

Three officers between the ages of 40 and 49 killed themselves because of criminal charges or an investigation and an additional officer in this group took his life due to departmental violations. This age bracket also had six officers who committed suicide due to relationship problems, two who cited unspecified personal issues, and one who suffered post-traumatic stress disorder. Other cases in this group were attributed to depression (1), financial problems (1), and a physical ailment (1). Two of the three suicides attributed to job stress in the study were also found in the age group.

There were six suicides among officers in the 50-62 years of age group. Two were attributed to criminal charges or an investigation, one was the result of departmental violations, and one was due to depression. A physical ailment was cited as the primary cause in an additional suicide and job stress was reported in another.

The observed frequency for each age group was fairly proximal to the expected frequency in cases citing criminal charges or investigations as the primary cause.

Similarly, the distribution across age groups was close to expected for cases cited departmental violations, depression, and financial problems. There were some slight variations between the observed frequency and the expected frequency across the other factors but none were statistically significant and only a few were deemed worthy of further mention.

Although not statistically significant, the eight suicides among 20-29 year-old officers in which relationship problems were causal are higher than the expected 3.88 cases. This causal factor was not cited in the death of any officer in the 50-62 years of age group, yet two were expected. Additionally, job stress was reported in two suicides in the 40-49 bracket, but only one was expected. A similar situation was found in the 30-39 years of age group where two cases of suicide were attributed to post-traumatic stress disorder, double the expected frequency.

DISCUSSION

The general characteristics and population description are rather self-explanatory and require no further discussion in this context. The descriptive analysis is comparatively straightforward as well due to the narrative coupled with the table for each factor in the analysis. Comparative analyses can be somewhat more problematic in general terms, however, due to the small sample sizes, the lack of statistical confidence, and the absence of statistical significance among the factors being analyzed, the results of this section tended to be simply descriptive data. There were clearly some inferences that could be made such as the use of alcohol among supervisory or female officers, the absence of cases of misconduct among female officers, and the possibility that female officers may

be more likely to chose an alternative method; however, the lack of statistical confidence precludes generalizations toward a larger population.

CHAPTER 5

CONCLUSION

This study, like the majority of other studies on police suicide, identified problems with availability of data. In many of the cases, complete information was lacking and this was generally attributable to the lack of disclosure from the investigating department. Even though a content analysis of newspaper accounts is much more accessible than departmental files, the media, as well as other sources of information, is impeded by an organization that limits information in order to protect its image, its officers, and the families. For example, the most critical variable in police suicide may be the primary causal factor, yet it was not reported in over 36 percent of the cases in the study.

In the existing literature, it is fairly well-accepted that police officers are 2-3 times more likely to kill themselves as to be killed by a criminal in the line of duty and the National Association of Chiefs of Police estimate that over 300 police offices commit suicide each year. Perplexingly, this study covered four newspaper databases containing articles from over 200 local, regional, and national newspapers for more than two and one-half years, yet only revealed 82 separate cases of police officer suicide.

The characteristics of the population in this sample were closely representative of that cited in the existing literature. The other studies reflected that the majority of police suicides were carried out by male patrol officers, 25-40 years of age, typically with a firearm. The years of service varied from department to department. In this research, the general characteristics of the police suicide officer point toward a male patrol officer,

approximately 38 years of age with 12 years of police service. Additionally, firearms were used in approximately 96 percent of the cases.

The presence of alcohol was perceived as common in the existing literature, yet in this study, it was documented in only four cases. As previously stated, this does not necessarily indicate that it was not a factor in the remaining 78 cases but the information was either selectively not reported or was unavailable to the media.

The occurrence of murder-suicide scenarios was reported in only a small percentage of the available studies. Even in those cases, the numbers were relatively small and deemed inconsequential. This phenomenon occurred 12 times in this study, equating to a variable present in almost 15 percent of the cases. Sixty-seven percent of these occurred in situations where relationship problems were documented as the primary causal factors.

Stress in generally perceived as the primary causation in the majority of police officer suicides in the existing literature. Almost every researcher mentions the high levels of stress and the majority of prevention programs appear to focus on stress reduction techniques and related counseling. In fact, several of the studies focused solely on the stress-suicide link among police officers, concluding that it was the primary reason so many officers took their own lives.

This study revealed that stress was reported as the primary causal factor in only three suicides which equates to a mere 5.8 percent of the cases in which causation was documented. Moreover, the majority of officers who kill themselves are line officers and there was not a single case where job stress was documented as the principal reason in the self-inflicted death of a patrol officer in this study. This brings into question the

commonly-held position that police work is fraught with high levels of stress and that this stress is responsible for the majority of officer suicides.

This study did find support for the literature's position that relationship problems are major contributing factors in police suicides. This factor was cited in 19 of the 52 cases where causal factors were reported, equating to over 36 percent of the total in this study. Conversely, there was little support indicating that post-traumatic stress disorder was a primary causal factor in police suicides. The literature tends to emphasize the high potential for officers to be injured, have a partner injured or killed, or have to take someone else's life in the line of duty, thus contributing to a high incidence of this disorder. However, PTSD was cited in only three cases, equating to less than six percent of the total cases in this study.

Interestingly, this study revealed that criminal activity or an investigation of alleged criminal wrongdoing was the primary factor is over 21 percent of the 52 cases in which causation was cited and in over 13 percent of the total cases. This factor is seldom mentioned in the existing literature and, in those studies where it is mentioned, there is a tendency to brush over it. Obviously, citizens do not want to consider that the people paid to protect them may be the ones they need protection from but this finding seems significant enough to indicate that it is indeed a problem that should be addressed in more detail. After all, this study indicates that it is the primary factor in 11 of 52 officer suicides, second only to relationship problems.

Even more provocative is that the majority of these cases involved a sex offense of some type. When criminal activities is coupled with departmental violations, there are

eight cases that involve a sex offense--over 57 percent. There was little, if any, indication in the existing literature that this was a primary factor in police suicides.

There are portions of this study that are supportive of the findings in the existing literature. The general characteristics of the officers who kill themselves are similar and relationship problems are a primary causal factor. This study does bring into question some of the commonly held beliefs and findings of other research, particularly in the area of job stress. There was little support to identify this as a major attributive factor. Perhaps the most intriguing aspect of this study is the revelation regarding criminal conduct, especially in the area of sex offenses. This area is seldom discussed in any of the existing literature and there is no empirical research in this area.

As other researchers stated, the area of police suicide is in need of further study. National databases are necessary as are improved data collection techniques and mandatory reporting. More importantly, police administrators must change their paradigms and release information on police suicides for scientific research. Based on this study, the area of criminal activity and sex offenses as primary causal factors is especially in need of additional, in-depth research.

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APPENDIX

CODING INSTRUMENT

This study focused on the following variables in examining police suicide:

1. The officer's rank
2. The year of the suicide
3. The state in which the suicide occurred
4. The department that employed the officer
5. The officer's age
6. The officer's years of service
7. The officer's gender
8. The method selected to complete the suicide
9. The primary causation
10. The specific misconduct if criminal or departmental violations were primary causes
11. The presence of alcohol as a contributing factor
12. The occurrence of murder-suicide
13. The index from which the article was pulled

In establishing a data table, it was necessary to code some of the non-numeric variables to allow proper statistical manipulation. These coded variables are:

RANK

1. Patrol officer (includes trooper, deputy, agent)
2. Detective
3. Sergeant
4. Lieutenant
5. Captain
6. Chief (includes County Sheriff)

GENDER

1. Male
2. Female

METHOD

1. Firearm
2. Car Crash
3. Hanging
4. Carbon Monoxide Poisoning

PRESENCE OF ALCOHOL

1. Documented
2. Not Documented

OCCURRENCE OF MURDER-SUICIDE

1. Occurred
2. Did Not Occur

PRIMARY CAUSATION

1. Criminal Activity or Investigation of Alleged Criminal Conduct
2. Departmental Violations
3. Depression
4. Relationship Problems
5. Unspecified Personal Issues
6. Post-Traumatic Stress Disorder
7. Physical Ailment
8. Job Stress
9. Financial Problems

SPECIFIC MISCONDUCT

1. Sex Offense
2. Personnel Violations
3. Misdemeanors or Other Violations
4. Felonies

INDEX

1. Newspaper Abstracts
2. New York Times
3. Data Times
4. Westlaw (United States Newspapers)

ABSTRACT

This study analyzed the content of newspaper articles reporting police suicides from 1 January 1996 through 1 October 1998. These articles were gathered from four databases: Newspaper Abstracts, New York Times, Data Times, and Westlaw (United States Newspapers). Over 200 local, regional, and national newspapers are included in these databases. The search terms were "police" and "suicide" in the first three databases and in Westlaw, the terms were defined as "police" and "suicide" in the same paragraph. Other variations such as "cop," "officer," "trooper," and "sheriff" were also inserted but provided no additional cases.

A total of 19,255 articles were screened to determine appropriateness and 319 were found to be related specifically to police suicides. Within these reports, 82 unique cases were identified and these were studied to ascertain the similarities and differences when compared to existing literature on the subject.

There was some support for the characteristics of the population representative of police suicide; however, the primary causal factors were contrary to those commonly cited. Job stress is reported as the primary causal factor in the majority of the literature, yet was reported in only three cases in this study. Moreover, criminal conduct and departmental violations were reported as the second major causation, behind relationship problems, but there is little information regarding this issue in other studies. Further, the majority of the cases where this was cited as the cause, sex offenses were the most commonly reported misconduct.

Obviously, there are some limitations to any research regarding police suicide and this study has identified some areas clearly in need of further study.

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